

Supplementary materials

Serotonin Promotes Serum Albumin Interaction with Monomeric Amyloid β Peptide

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ALB_SRO.pdb and ALB_TRP.pdb files: model tertiary structures of HSA-SRO/TRP complexes predicted using AutoDock Vina software (<http://vina.scripps.edu/index.html>) [1], based on crystal structure of HSA (chain A of PDB entry 1UOR).

1. Trott, O. and A.J. Olson, *AutoDock Vina: improving the speed and accuracy of docking with a new scoring function, efficient optimization, and multithreading*. J Comput Chem, 2010. **31**(2): p. 455-61.

ALB_SRO.pdb

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CRYST1    58.860    88.280    60.680  90.00 101.85  90.00 P 1 21 1      0
ATOM       1  N   LYS A   4      -4.155 -21.388 -11.190  1.00 29.11      N
ATOM       2  CA  LYS A   4      -3.964 -19.918 -11.113  1.00 27.16      C
ATOM       3  C   LYS A   4      -2.692 -19.737 -10.315  1.00 26.91      C
ATOM       4  O   LYS A   4      -2.108 -20.724  -9.881  1.00 25.06      O
ATOM       5  CB  LYS A   4      -5.146 -19.257 -10.398  1.00 25.62      C
ATOM       6  CG  LYS A   4      -6.503 -19.517 -11.051  1.00 24.88      C
ATOM       7  CD  LYS A   4      -7.331 -18.233 -11.175  1.00 26.34      C
ATOM       8  CE  LYS A   4      -8.649 -18.441 -11.958  1.00 27.70      C
ATOM       9  NZ  LYS A   4      -9.717 -19.227 -11.215  1.00 25.48      N1+
ATOM      10  N   SER A   5      -2.168 -18.518 -10.290  1.00 28.23      N
ATOM      11  CA  SER A   5      -0.939 -18.247  -9.551  1.00 30.21      C
ATOM      12  C   SER A   5      -1.207 -17.300  -8.380  1.00 30.60      C
ATOM      13  O   SER A   5      -2.299 -16.719  -8.247  1.00 28.63      O
ATOM      14  CB  SER A   5       0.155 -17.652 -10.476  1.00 30.07      C
ATOM      15  OG  SER A   5       0.110 -16.225 -10.543  1.00 25.84      O
ATOM      16  N   GLU A   6      -0.206 -17.159  -7.526  1.00 29.67      N
ATOM      17  CA  GLU A   6      -0.250 -16.146  -6.511  1.00 28.73      C
ATOM      18  C   GLU A   6       0.506 -14.913  -6.949  1.00 25.98      C
ATOM      19  O   GLU A   6      -0.094 -13.854  -7.065  1.00 25.99      O
ATOM      20  CB  GLU A   6       0.289 -16.706  -5.196  1.00 32.20      C
ATOM      21  CG  GLU A   6      -0.730 -17.561  -4.457  1.00 34.86      C
ATOM      22  CD  GLU A   6      -2.158 -17.229  -4.877  1.00 37.50      C
ATOM      23  OE1 GLU A   6      -2.669 -16.146  -4.502  1.00 36.49      O
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ATOM	24	OE2	GLU	A	6	-2.746	-18.025	-5.641	1.00	41.69	O1-
ATOM	25	N	VAL	A	7	1.732	-15.105	-7.428	1.00	26.46	N
ATOM	26	CA	VAL	A	7	2.660	-13.992	-7.658	1.00	28.01	C
ATOM	27	C	VAL	A	7	2.019	-12.877	-8.472	1.00	29.09	C
ATOM	28	O	VAL	A	7	1.728	-11.784	-7.951	1.00	28.54	O
ATOM	29	CB	VAL	A	7	3.929	-14.439	-8.413	1.00	27.74	C
ATOM	30	CG1	VAL	A	7	4.947	-13.333	-8.405	1.00	29.26	C
ATOM	31	CG2	VAL	A	7	4.524	-15.668	-7.773	1.00	31.03	C
ATOM	32	N	ALA	A	8	1.681	-13.202	-9.716	1.00	29.77	N
ATOM	33	CA	ALA	A	8	1.215	-12.182	-10.646	1.00	29.95	C
ATOM	34	C	ALA	A	8	-0.133	-11.672	-10.189	1.00	29.29	C
ATOM	35	O	ALA	A	8	-0.491	-10.525	-10.473	1.00	30.27	O
ATOM	36	CB	ALA	A	8	1.117	-12.736	-12.073	1.00	29.88	C
ATOM	37	N	HIS	A	9	-0.866	-12.500	-9.452	1.00	28.46	N
ATOM	38	CA	HIS	A	9	-2.215	-12.121	-9.052	1.00	28.28	C
ATOM	39	C	HIS	A	9	-2.121	-10.972	-8.070	1.00	28.15	C
ATOM	40	O	HIS	A	9	-2.926	-10.045	-8.124	1.00	28.25	O
ATOM	41	CB	HIS	A	9	-2.961	-13.275	-8.387	1.00	26.15	C
ATOM	42	CG	HIS	A	9	-4.260	-12.866	-7.776	1.00	23.88	C
ATOM	43	CD2	HIS	A	9	-5.086	-11.821	-8.052	1.00	22.55	C
ATOM	44	ND1	HIS	A	9	-4.868	-13.577	-6.766	1.00	22.06	N
ATOM	45	CE1	HIS	A	9	-6.009	-12.994	-6.443	1.00	23.71	C
ATOM	46	NE2	HIS	A	9	-6.162	-11.927	-7.212	1.00	25.62	N
ATOM	47	N	ARG	A	10	-1.181	-11.070	-7.134	1.00	26.61	N
ATOM	48	CA	ARG	A	10	-0.934	-9.977	-6.211	1.00	26.64	C
ATOM	49	C	ARG	A	10	-0.481	-8.776	-7.042	1.00	26.73	C
ATOM	50	O	ARG	A	10	-1.080	-7.701	-6.952	1.00	26.46	O
ATOM	51	CB	ARG	A	10	0.123	-10.384	-5.179	1.00	25.45	C
ATOM	52	CG	ARG	A	10	-0.411	-11.233	-3.973	1.00	26.28	C
ATOM	53	CD	ARG	A	10	-1.808	-11.885	-4.176	1.00	22.90	C
ATOM	54	NE	ARG	A	10	-2.565	-11.999	-2.920	1.00	22.44	N
ATOM	55	CZ	ARG	A	10	-3.843	-12.387	-2.815	1.00	23.29	C
ATOM	56	NH1	ARG	A	10	-4.491	-12.934	-3.836	1.00	20.37	N1+
ATOM	57	NH2	ARG	A	10	-4.460	-12.295	-1.650	1.00	22.05	N
ATOM	58	N	PHE	A	11	0.332	-9.061	-8.061	1.00	27.91	N
ATOM	59	CA	PHE	A	11	0.735	-8.053	-9.045	1.00	25.84	C
ATOM	60	C	PHE	A	11	-0.452	-7.383	-9.727	1.00	24.74	C
ATOM	61	O	PHE	A	11	-0.444	-6.168	-9.938	1.00	25.29	O
ATOM	62	CB	PHE	A	11	1.652	-8.664	-10.105	1.00	24.40	C
ATOM	63	CG	PHE	A	11	2.851	-7.809	-10.430	1.00	27.14	C
ATOM	64	CD1	PHE	A	11	2.762	-6.785	-11.368	1.00	26.91	C
ATOM	65	CD2	PHE	A	11	4.042	-7.965	-9.728	1.00	26.00	C
ATOM	66	CE1	PHE	A	11	3.829	-5.934	-11.585	1.00	27.01	C
ATOM	67	CE2	PHE	A	11	5.115	-7.111	-9.945	1.00	25.82	C
ATOM	68	CZ	PHE	A	11	5.009	-6.095	-10.871	1.00	25.28	C
ATOM	69	N	LYS	A	12	-1.530	-8.136	-9.903	1.00	23.91	N
ATOM	70	CA	LYS	A	12	-2.692	-7.668	-10.651	1.00	22.95	C
ATOM	71	C	LYS	A	12	-3.685	-6.841	-9.819	1.00	22.94	C
ATOM	72	O	LYS	A	12	-4.825	-6.624	-10.255	1.00	22.98	O
ATOM	73	CB	LYS	A	12	-3.449	-8.860	-11.267	1.00	23.41	C
ATOM	74	CG	LYS	A	12	-2.859	-9.489	-12.523	1.00	18.48	C
ATOM	75	CD	LYS	A	12	-3.793	-10.579	-13.069	1.00	15.47	C
ATOM	76	CE	LYS	A	12	-3.024	-11.641	-13.836	1.00	13.47	C
ATOM	77	NZ	LYS	A	12	-2.824	-11.308	-15.273	1.00	12.20	N1+
ATOM	78	N	ASP	A	13	-3.313	-6.444	-8.606	1.00	22.30	N
ATOM	79	CA	ASP	A	13	-4.140	-5.462	-7.897	1.00	22.25	C
ATOM	80	C	ASP	A	13	-3.358	-4.266	-7.363	1.00	20.77	C
ATOM	81	O	ASP	A	13	-3.612	-3.114	-7.758	1.00	18.06	O
ATOM	82	CB	ASP	A	13	-4.929	-6.102	-6.748	1.00	27.23	C
ATOM	83	CG	ASP	A	13	-4.846	-7.609	-6.734	1.00	30.68	C
ATOM	84	OD1	ASP	A	13	-3.712	-8.130	-6.758	1.00	31.81	O
ATOM	85	OD2	ASP	A	13	-5.905	-8.262	-6.569	1.00	31.63	O1-
ATOM	86	N	LEU	A	14	-2.360	-4.555	-6.527	1.00	19.90	N
ATOM	87	CA	LEU	A	14	-1.567	-3.530	-5.840	1.00	19.12	C
ATOM	88	C	LEU	A	14	-0.542	-2.906	-6.802	1.00	21.59	C
ATOM	89	O	LEU	A	14	0.414	-2.214	-6.388	1.00	20.70	O
ATOM	90	CB	LEU	A	14	-0.867	-4.154	-4.625	1.00	16.73	C
ATOM	91	CG	LEU	A	14	0.256	-5.186	-4.824	1.00	15.13	C
ATOM	92	CD1	LEU	A	14	1.447	-4.781	-3.981	1.00	11.65	C
ATOM	93	CD2	LEU	A	14	-0.189	-6.568	-4.441	1.00	11.37	C
ATOM	94	N	GLY	A	15	-0.829	-3.065	-8.092	1.00	21.89	N

ATOM	95	CA	GLY	A	15	0.087	-2.683	-9.140	1.00	23.39	C
ATOM	96	C	GLY	A	15	1.491	-3.220	-8.965	1.00	24.62	C
ATOM	97	O	GLY	A	15	1.700	-4.264	-8.353	1.00	23.01	O
ATOM	98	N	GLU	A	16	2.457	-2.395	-9.367	1.00	26.22	N
ATOM	99	CA	GLU	A	16	3.837	-2.809	-9.504	1.00	25.91	C
ATOM	100	C	GLU	A	16	4.725	-2.038	-8.535	1.00	27.19	C
ATOM	101	O	GLU	A	16	5.421	-2.680	-7.760	1.00	26.80	O
ATOM	102	CB	GLU	A	16	4.282	-2.641	-10.966	1.00	27.05	C
ATOM	103	CG	GLU	A	16	5.730	-2.204	-11.175	1.00	28.89	C
ATOM	104	CD	GLU	A	16	6.302	-2.613	-12.537	1.00	29.95	C
ATOM	105	OE1	GLU	A	16	5.637	-2.398	-13.596	1.00	28.27	O
ATOM	106	OE2	GLU	A	16	7.444	-3.137	-12.531	1.00	28.17	O1-
ATOM	107	N	GLU	A	17	4.596	-0.699	-8.451	1.00	30.38	N
ATOM	108	CA	GLU	A	17	5.444	0.099	-7.520	1.00	30.91	C
ATOM	109	C	GLU	A	17	5.306	-0.525	-6.158	1.00	32.10	C
ATOM	110	O	GLU	A	17	6.187	-1.268	-5.730	1.00	34.11	O
ATOM	111	CB	GLU	A	17	5.044	1.589	-7.404	1.00	28.23	C
ATOM	112	CG	GLU	A	17	6.165	2.451	-6.706	1.00	30.17	C
ATOM	113	CD	GLU	A	17	5.688	3.762	-5.967	1.00	32.12	C
ATOM	114	OE1	GLU	A	17	5.082	4.666	-6.598	1.00	30.67	O
ATOM	115	OE2	GLU	A	17	6.027	3.939	-4.760	1.00	31.49	O1-
ATOM	116	N	ASN	A	18	4.054	-0.563	-5.720	1.00	33.09	N
ATOM	117	CA	ASN	A	18	3.696	-1.121	-4.420	1.00	32.50	C
ATOM	118	C	ASN	A	18	3.913	-2.668	-4.325	1.00	31.11	C
ATOM	119	O	ASN	A	18	3.947	-3.231	-3.212	1.00	30.55	O
ATOM	120	CB	ASN	A	18	2.249	-0.690	-4.057	1.00	31.08	C
ATOM	121	CG	ASN	A	18	2.086	0.851	-3.988	1.00	28.14	C
ATOM	122	ND2	ASN	A	18	0.918	1.344	-4.361	1.00	28.12	N
ATOM	123	OD1	ASN	A	18	3.018	1.572	-3.648	1.00	24.14	O
ATOM	124	N	PHE	A	19	4.287	-3.307	-5.437	1.00	27.36	N
ATOM	125	CA	PHE	A	19	4.761	-4.691	-5.361	1.00	25.30	C
ATOM	126	C	PHE	A	19	6.240	-4.636	-5.071	1.00	25.50	C
ATOM	127	O	PHE	A	19	6.703	-5.188	-4.078	1.00	26.44	O
ATOM	128	CB	PHE	A	19	4.513	-5.455	-6.667	1.00	24.34	C
ATOM	129	CG	PHE	A	19	4.448	-6.959	-6.504	1.00	21.73	C
ATOM	130	CD1	PHE	A	19	5.594	-7.720	-6.488	1.00	21.65	C
ATOM	131	CD2	PHE	A	19	3.236	-7.616	-6.507	1.00	21.52	C
ATOM	132	CE1	PHE	A	19	5.532	-9.106	-6.486	1.00	18.58	C
ATOM	133	CE2	PHE	A	19	3.175	-8.997	-6.508	1.00	20.40	C
ATOM	134	CZ	PHE	A	19	4.328	-9.738	-6.499	1.00	18.31	C
ATOM	135	N	LYS	A	20	6.957	-3.831	-5.839	1.00	24.36	N
ATOM	136	CA	LYS	A	20	8.340	-3.545	-5.501	1.00	26.07	C
ATOM	137	C	LYS	A	20	8.335	-3.055	-4.053	1.00	26.27	C
ATOM	138	O	LYS	A	20	9.090	-3.567	-3.221	1.00	25.42	O
ATOM	139	CB	LYS	A	20	8.921	-2.458	-6.432	1.00	27.79	C
ATOM	140	CG	LYS	A	20	9.948	-2.952	-7.490	1.00	26.76	C
ATOM	141	CD	LYS	A	20	9.952	-2.041	-8.743	1.00	22.31	C
ATOM	142	CE	LYS	A	20	10.898	-2.548	-9.824	1.00	20.10	C
ATOM	143	NZ	LYS	A	20	12.337	-2.566	-9.387	1.00	19.71	N1+
ATOM	144	N	ALA	A	21	7.287	-2.301	-3.711	1.00	26.57	N
ATOM	145	CA	ALA	A	21	7.264	-1.504	-2.480	1.00	25.54	C
ATOM	146	C	ALA	A	21	7.045	-2.381	-1.289	1.00	23.24	C
ATOM	147	O	ALA	A	21	7.661	-2.178	-0.261	1.00	24.58	O
ATOM	148	CB	ALA	A	21	6.188	-0.411	-2.539	1.00	24.10	C
ATOM	149	N	LEU	A	22	6.251	-3.422	-1.444	1.00	22.80	N
ATOM	150	CA	LEU	A	22	6.151	-4.371	-0.353	1.00	23.66	C
ATOM	151	C	LEU	A	22	7.414	-5.226	-0.300	1.00	22.00	C
ATOM	152	O	LEU	A	22	8.277	-4.987	0.543	1.00	22.37	O
ATOM	153	CB	LEU	A	22	4.892	-5.242	-0.489	1.00	25.44	C
ATOM	154	CG	LEU	A	22	3.648	-4.849	0.324	1.00	23.88	C
ATOM	155	CD1	LEU	A	22	4.053	-4.132	1.586	1.00	21.55	C
ATOM	156	CD2	LEU	A	22	2.740	-3.964	-0.500	1.00	23.25	C
ATOM	157	N	VAL	A	23	7.649	-5.965	-1.382	1.00	19.37	N
ATOM	158	CA	VAL	A	23	8.590	-7.075	-1.410	1.00	16.76	C
ATOM	159	C	VAL	A	23	10.018	-6.698	-0.945	1.00	18.40	C
ATOM	160	O	VAL	A	23	10.734	-7.519	-0.372	1.00	17.50	O
ATOM	161	CB	VAL	A	23	8.579	-7.698	-2.823	1.00	15.62	C
ATOM	162	CG1	VAL	A	23	9.429	-8.950	-2.878	1.00	13.90	C
ATOM	163	CG2	VAL	A	23	7.157	-8.040	-3.211	1.00	9.89	C
ATOM	164	N	LEU	A	24	10.336	-5.412	-0.999	1.00	20.80	N
ATOM	165	CA	LEU	A	24	11.503	-4.879	-0.319	1.00	21.23	C

ATOM	166	C	LEU	A	24	11.278	-4.949	1.182	1.00	22.45	C
ATOM	167	O	LEU	A	24	11.885	-5.812	1.826	1.00	25.32	O
ATOM	168	CB	LEU	A	24	11.767	-3.434	-0.729	1.00	23.94	C
ATOM	169	CG	LEU	A	24	13.205	-2.910	-0.666	1.00	25.01	C
ATOM	170	CD1	LEU	A	24	13.154	-1.397	-0.414	1.00	24.47	C
ATOM	171	CD2	LEU	A	24	14.017	-3.618	0.417	1.00	24.82	C
ATOM	172	N	ILE	A	25	10.410	-4.100	1.756	1.00	21.80	N
ATOM	173	CA	ILE	A	25	10.241	-4.122	3.238	1.00	22.89	C
ATOM	174	C	ILE	A	25	10.125	-5.571	3.747	1.00	23.14	C
ATOM	175	O	ILE	A	25	10.935	-5.997	4.564	1.00	20.48	O
ATOM	176	CB	ILE	A	25	8.993	-3.319	3.785	1.00	19.69	C
ATOM	177	CG1	ILE	A	25	7.714	-3.751	3.081	1.00	18.78	C
ATOM	178	CG2	ILE	A	25	9.220	-1.841	3.691	1.00	14.48	C
ATOM	179	CD1	ILE	A	25	6.793	-2.619	2.745	1.00	19.12	C
ATOM	180	N	ALA	A	26	9.289	-6.364	3.071	1.00	23.61	N
ATOM	181	CA	ALA	A	26	9.182	-7.799	3.320	1.00	24.15	C
ATOM	182	C	ALA	A	26	10.563	-8.405	3.520	1.00	24.53	C
ATOM	183	O	ALA	A	26	10.954	-8.689	4.649	1.00	24.25	O
ATOM	184	CB	ALA	A	26	8.475	-8.487	2.149	1.00	23.75	C
ATOM	185	N	PHE	A	27	11.367	-8.391	2.458	1.00	25.34	N
ATOM	186	CA	PHE	A	27	12.700	-8.999	2.472	1.00	23.54	C
ATOM	187	C	PHE	A	27	13.657	-8.301	3.432	1.00	21.84	C
ATOM	188	O	PHE	A	27	14.755	-8.811	3.685	1.00	21.92	O
ATOM	189	CB	PHE	A	27	13.312	-8.985	1.067	1.00	22.66	C
ATOM	190	CG	PHE	A	27	12.781	-10.058	0.157	1.00	21.80	C
ATOM	191	CD1	PHE	A	27	12.742	-11.375	0.562	1.00	22.31	C
ATOM	192	CD2	PHE	A	27	12.383	-9.753	-1.130	1.00	19.87	C
ATOM	193	CE1	PHE	A	27	12.309	-12.365	-0.311	1.00	23.11	C
ATOM	194	CE2	PHE	A	27	11.955	-10.733	-1.999	1.00	17.81	C
ATOM	195	CZ	PHE	A	27	11.914	-12.034	-1.595	1.00	20.05	C
ATOM	196	N	ALA	A	28	13.258	-7.145	3.956	1.00	19.72	N
ATOM	197	CA	ALA	A	28	14.162	-6.345	4.775	1.00	20.10	C
ATOM	198	C	ALA	A	28	13.699	-5.958	6.201	1.00	21.53	C
ATOM	199	O	ALA	A	28	14.345	-5.141	6.856	1.00	21.18	O
ATOM	200	CB	ALA	A	28	14.589	-5.111	4.002	1.00	19.50	C
ATOM	201	N	GLN	A	29	12.557	-6.484	6.644	1.00	22.14	N
ATOM	202	CA	GLN	A	29	12.293	-6.695	8.068	1.00	19.68	C
ATOM	203	C	GLN	A	29	12.975	-8.025	8.333	1.00	22.08	C
ATOM	204	O	GLN	A	29	13.984	-8.084	9.029	1.00	21.67	O
ATOM	205	CB	GLN	A	29	10.785	-6.840	8.336	1.00	15.49	C
ATOM	206	CG	GLN	A	29	9.953	-5.582	8.068	1.00	16.39	C
ATOM	207	CD	GLN	A	29	8.445	-5.805	8.202	1.00	17.09	C
ATOM	208	NE2	GLN	A	29	7.699	-4.724	8.411	1.00	12.64	N
ATOM	209	OE1	GLN	A	29	7.959	-6.934	8.092	1.00	19.84	O
ATOM	210	N	TYR	A	30	12.622	-8.974	7.462	1.00	24.94	N
ATOM	211	CA	TYR	A	30	13.071	-10.369	7.483	1.00	23.92	C
ATOM	212	C	TYR	A	30	14.537	-10.604	7.852	1.00	24.37	C
ATOM	213	O	TYR	A	30	14.813	-11.198	8.911	1.00	26.54	O
ATOM	214	CB	TYR	A	30	12.785	-11.008	6.129	1.00	22.66	C
ATOM	215	CG	TYR	A	30	11.456	-11.702	6.058	1.00	24.59	C
ATOM	216	CD1	TYR	A	30	11.236	-12.867	6.775	1.00	26.93	C
ATOM	217	CD2	TYR	A	30	10.448	-11.251	5.218	1.00	25.02	C
ATOM	218	CE1	TYR	A	30	10.052	-13.584	6.651	1.00	27.16	C
ATOM	219	CE2	TYR	A	30	9.253	-11.953	5.082	1.00	26.54	C
ATOM	220	CZ	TYR	A	30	9.068	-13.128	5.798	1.00	27.87	C
ATOM	221	OH	TYR	A	30	7.931	-13.888	5.629	1.00	28.25	O
ATOM	222	N	LEU	A	31	15.469	-10.188	6.982	1.00	19.65	N
ATOM	223	CA	LEU	A	31	16.893	-10.427	7.227	1.00	16.82	C
ATOM	224	C	LEU	A	31	17.698	-9.262	7.838	1.00	16.70	C
ATOM	225	O	LEU	A	31	18.814	-9.467	8.332	1.00	16.93	O
ATOM	226	CB	LEU	A	31	17.569	-10.920	5.949	1.00	18.70	C
ATOM	227	CG	LEU	A	31	17.564	-12.423	5.628	1.00	18.34	C
ATOM	228	CD1	LEU	A	31	18.751	-12.798	4.728	1.00	16.70	C
ATOM	229	CD2	LEU	A	31	17.629	-13.188	6.913	1.00	17.85	C
ATOM	230	N	GLN	A	32	17.196	-8.040	7.703	1.00	12.99	N
ATOM	231	CA	GLN	A	32	17.563	-6.922	8.579	1.00	15.39	C
ATOM	232	C	GLN	A	32	19.015	-6.620	9.024	1.00	16.50	C
ATOM	233	O	GLN	A	32	19.233	-5.706	9.832	1.00	16.68	O
ATOM	234	CB	GLN	A	32	16.647	-6.914	9.830	1.00	17.32	C
ATOM	235	CG	GLN	A	32	16.825	-8.056	10.882	1.00	18.77	C
ATOM	236	CD	GLN	A	32	16.438	-7.610	12.302	1.00	19.47	C

ATOM	237	NE2	GLN	A	32	17.197	-8.054	13.301	1.00	11.37	N
ATOM	238	OE1	GLN	A	32	15.564	-6.759	12.468	1.00	21.08	O
ATOM	239	N	GLN	A	33	20.018	-7.295	8.474	1.00	17.10	N
ATOM	240	CA	GLN	A	33	21.399	-6.839	8.685	1.00	18.29	C
ATOM	241	C	GLN	A	33	22.190	-6.783	7.353	1.00	19.96	C
ATOM	242	O	GLN	A	33	22.912	-5.816	7.095	1.00	20.35	O
ATOM	243	CB	GLN	A	33	22.119	-7.705	9.752	1.00	16.98	C
ATOM	244	CG	GLN	A	33	21.184	-8.265	10.879	1.00	21.56	C
ATOM	245	CD	GLN	A	33	21.643	-7.989	12.350	1.00	23.80	C
ATOM	246	NE2	GLN	A	33	22.932	-7.685	12.533	1.00	26.50	N
ATOM	247	OE1	GLN	A	33	20.834	-8.040	13.295	1.00	19.44	O
ATOM	248	N	CYS	A	34	21.943	-7.745	6.458	1.00	20.58	N
ATOM	249	CA	CYS	A	34	22.517	-7.742	5.113	1.00	18.89	C
ATOM	250	C	CYS	A	34	22.254	-6.421	4.403	1.00	20.26	C
ATOM	251	O	CYS	A	34	21.094	-5.970	4.313	1.00	18.49	O
ATOM	252	CB	CYS	A	34	21.906	-8.857	4.277	1.00	17.31	C
ATOM	253	SG	CYS	A	34	22.155	-10.502	4.964	1.00	28.19	S
ATOM	254	N	PRO	A	35	23.309	-5.836	3.795	1.00	19.86	N
ATOM	255	CA	PRO	A	35	23.265	-4.593	3.019	1.00	16.08	C
ATOM	256	C	PRO	A	35	22.189	-4.451	1.981	1.00	13.85	C
ATOM	257	O	PRO	A	35	21.368	-5.324	1.779	1.00	11.96	O
ATOM	258	CB	PRO	A	35	24.648	-4.512	2.420	1.00	14.75	C
ATOM	259	CG	PRO	A	35	25.491	-4.991	3.508	1.00	21.60	C
ATOM	260	CD	PRO	A	35	24.692	-6.116	4.215	1.00	21.49	C
ATOM	261	N	PHE	A	36	22.110	-3.257	1.430	1.00	16.85	N
ATOM	262	CA	PHE	A	36	20.988	-2.926	0.602	1.00	17.73	C
ATOM	263	C	PHE	A	36	20.944	-3.782	-0.646	1.00	20.98	C
ATOM	264	O	PHE	A	36	20.009	-4.576	-0.789	1.00	24.39	O
ATOM	265	CB	PHE	A	36	20.979	-1.443	0.233	1.00	18.53	C
ATOM	266	CG	PHE	A	36	19.674	-0.996	-0.359	1.00	19.96	C
ATOM	267	CD1	PHE	A	36	18.482	-1.376	0.223	1.00	18.68	C
ATOM	268	CD2	PHE	A	36	19.632	-0.366	-1.579	1.00	20.99	C
ATOM	269	CE1	PHE	A	36	17.308	-1.164	-0.391	1.00	17.22	C
ATOM	270	CE2	PHE	A	36	18.443	-0.149	-2.195	1.00	19.46	C
ATOM	271	CZ	PHE	A	36	17.282	-0.559	-1.600	1.00	19.20	C
ATOM	272	N	GLU	A	37	21.990	-3.721	-1.482	1.00	21.10	N
ATOM	273	CA	GLU	A	37	21.895	-4.190	-2.874	1.00	20.88	C
ATOM	274	C	GLU	A	37	21.529	-5.668	-3.024	1.00	20.33	C
ATOM	275	O	GLU	A	37	20.863	-6.060	-3.979	1.00	18.29	O
ATOM	276	CB	GLU	A	37	23.192	-3.914	-3.617	1.00	22.94	C
ATOM	277	CG	GLU	A	37	23.564	-2.453	-3.675	1.00	24.70	C
ATOM	278	CD	GLU	A	37	24.725	-2.103	-2.759	1.00	27.37	C
ATOM	279	OE1	GLU	A	37	25.368	-3.042	-2.215	1.00	26.97	O
ATOM	280	OE2	GLU	A	37	24.966	-0.880	-2.567	1.00	25.74	O1-
ATOM	281	N	ASP	A	38	22.115	-6.488	-2.161	1.00	20.03	N
ATOM	282	CA	ASP	A	38	21.747	-7.891	-1.979	1.00	18.25	C
ATOM	283	C	ASP	A	38	20.224	-8.028	-1.946	1.00	20.19	C
ATOM	284	O	ASP	A	38	19.615	-8.679	-2.800	1.00	17.87	O
ATOM	285	CB	ASP	A	38	22.348	-8.378	-0.663	1.00	16.94	C
ATOM	286	CG	ASP	A	38	23.796	-7.902	-0.463	1.00	18.58	C
ATOM	287	OD1	ASP	A	38	24.047	-6.683	-0.383	1.00	14.38	O
ATOM	288	OD2	ASP	A	38	24.696	-8.758	-0.380	1.00	22.12	O1-
ATOM	289	N	HIS	A	39	19.612	-7.271	-1.038	1.00	23.52	N
ATOM	290	CA	HIS	A	39	18.160	-7.214	-0.882	1.00	22.04	C
ATOM	291	C	HIS	A	39	17.507	-6.768	-2.173	1.00	20.54	C
ATOM	292	O	HIS	A	39	16.482	-7.318	-2.558	1.00	21.75	O
ATOM	293	CB	HIS	A	39	17.765	-6.228	0.235	1.00	22.52	C
ATOM	294	CG	HIS	A	39	17.962	-6.765	1.616	1.00	21.90	C
ATOM	295	CD2	HIS	A	39	17.572	-7.930	2.183	1.00	22.42	C
ATOM	296	ND1	HIS	A	39	18.606	-6.054	2.609	1.00	23.78	N
ATOM	297	CE1	HIS	A	39	18.596	-6.759	3.729	1.00	21.46	C
ATOM	298	NE2	HIS	A	39	17.980	-7.900	3.492	1.00	22.35	N
ATOM	299	N	VAL	A	40	18.052	-5.725	-2.797	1.00	17.74	N
ATOM	300	CA	VAL	A	40	17.394	-5.125	-3.959	1.00	17.68	C
ATOM	301	C	VAL	A	40	17.509	-5.956	-5.264	1.00	21.04	C
ATOM	302	O	VAL	A	40	16.509	-6.136	-5.967	1.00	22.22	O
ATOM	303	CB	VAL	A	40	17.863	-3.667	-4.225	1.00	15.09	C
ATOM	304	CG1	VAL	A	40	16.681	-2.748	-4.220	1.00	15.66	C
ATOM	305	CG2	VAL	A	40	18.816	-3.204	-3.185	1.00	12.61	C
ATOM	306	N	LYS	A	41	18.664	-6.575	-5.518	1.00	21.82	N
ATOM	307	CA	LYS	A	41	18.789	-7.519	-6.630	1.00	21.46	C

ATOM	308	C	LYS	A	41	17.644	-8.486	-6.523	1.00	21.01	C
ATOM	309	O	LYS	A	41	16.769	-8.480	-7.376	1.00	23.65	O
ATOM	310	CB	LYS	A	41	20.108	-8.290	-6.546	1.00	25.68	C
ATOM	311	CG	LYS	A	41	20.620	-8.833	-7.888	1.00	27.49	C
ATOM	312	CD	LYS	A	41	22.165	-8.736	-8.020	1.00	23.95	C
ATOM	313	CE	LYS	A	41	22.573	-8.660	-9.504	1.00	21.47	C
ATOM	314	NZ	LYS	A	41	23.966	-8.207	-9.722	1.00	16.15	N1+
ATOM	315	N	LEU	A	42	17.495	-9.053	-5.324	1.00	21.14	N
ATOM	316	CA	LEU	A	42	16.451	-10.045	-5.020	1.00	20.21	C
ATOM	317	C	LEU	A	42	15.021	-9.526	-5.193	1.00	18.80	C
ATOM	318	O	LEU	A	42	14.119	-10.252	-5.621	1.00	14.06	O
ATOM	319	CB	LEU	A	42	16.653	-10.582	-3.604	1.00	20.68	C
ATOM	320	CG	LEU	A	42	18.057	-11.154	-3.410	1.00	23.93	C
ATOM	321	CD1	LEU	A	42	18.337	-11.363	-1.954	1.00	26.48	C
ATOM	322	CD2	LEU	A	42	18.195	-12.468	-4.155	1.00	27.94	C
ATOM	323	N	VAL	A	43	14.828	-8.248	-4.920	1.00	20.91	N
ATOM	324	CA	VAL	A	43	13.557	-7.646	-5.243	1.00	25.09	C
ATOM	325	C	VAL	A	43	13.455	-7.618	-6.756	1.00	24.80	C
ATOM	326	O	VAL	A	43	12.655	-8.371	-7.319	1.00	24.61	O
ATOM	327	CB	VAL	A	43	13.424	-6.220	-4.671	1.00	29.14	C
ATOM	328	CG1	VAL	A	43	12.078	-5.628	-5.086	1.00	29.20	C
ATOM	329	CG2	VAL	A	43	13.555	-6.252	-3.122	1.00	29.89	C
ATOM	330	N	ASN	A	44	14.422	-6.952	-7.393	1.00	24.28	N
ATOM	331	CA	ASN	A	44	14.472	-6.794	-8.849	1.00	24.67	C
ATOM	332	C	ASN	A	44	13.983	-8.073	-9.527	1.00	25.13	C
ATOM	333	O	ASN	A	44	13.160	-8.021	-10.443	1.00	27.80	O
ATOM	334	CB	ASN	A	44	15.908	-6.461	-9.325	1.00	25.32	C
ATOM	335	CG	ASN	A	44	16.357	-5.040	-8.947	1.00	29.48	C
ATOM	336	ND2	ASN	A	44	15.803	-4.049	-9.631	1.00	31.83	N
ATOM	337	OD1	ASN	A	44	17.192	-4.838	-8.052	1.00	30.17	O
ATOM	338	N	GLU	A	45	14.326	-9.217	-8.942	1.00	24.11	N
ATOM	339	CA	GLU	A	45	14.019	-10.503	-9.553	1.00	25.12	C
ATOM	340	C	GLU	A	45	12.569	-10.992	-9.356	1.00	26.68	C
ATOM	341	O	GLU	A	45	11.931	-11.464	-10.315	1.00	26.81	O
ATOM	342	CB	GLU	A	45	15.015	-11.547	-9.043	1.00	22.72	C
ATOM	343	CG	GLU	A	45	16.351	-11.537	-9.773	1.00	16.42	C
ATOM	344	CD	GLU	A	45	17.486	-11.808	-8.848	1.00	12.41	C
ATOM	345	OE1	GLU	A	45	17.454	-12.854	-8.182	1.00	8.42	O
ATOM	346	OE2	GLU	A	45	18.353	-10.928	-8.705	1.00	12.61	O1-
ATOM	347	N	VAL	A	46	12.105	-10.980	-8.100	1.00	28.78	N
ATOM	348	CA	VAL	A	46	10.677	-11.141	-7.758	1.00	27.45	C
ATOM	349	C	VAL	A	46	9.849	-10.270	-8.670	1.00	25.30	C
ATOM	350	O	VAL	A	46	8.937	-10.754	-9.344	1.00	24.88	O
ATOM	351	CB	VAL	A	46	10.352	-10.637	-6.332	1.00	28.88	C
ATOM	352	CG1	VAL	A	46	8.928	-11.039	-5.958	1.00	28.73	C
ATOM	353	CG2	VAL	A	46	11.381	-11.152	-5.327	1.00	30.37	C
ATOM	354	N	THR	A	47	10.115	-8.966	-8.588	1.00	22.75	N
ATOM	355	CA	THR	A	47	9.506	-7.984	-9.460	1.00	21.85	C
ATOM	356	C	THR	A	47	9.418	-8.500	-10.909	1.00	24.34	C
ATOM	357	O	THR	A	47	8.328	-8.429	-11.517	1.00	23.89	O
ATOM	358	CB	THR	A	47	10.293	-6.653	-9.427	1.00	20.39	C
ATOM	359	CG2	THR	A	47	9.430	-5.527	-9.894	1.00	22.88	C
ATOM	360	OG1	THR	A	47	10.696	-6.351	-8.090	1.00	18.42	O
ATOM	361	N	GLU	A	48	10.502	-9.131	-11.402	1.00	24.26	N
ATOM	362	CA	GLU	A	48	10.540	-9.677	-12.778	1.00	25.92	C
ATOM	363	C	GLU	A	48	9.432	-10.732	-13.024	1.00	26.47	C
ATOM	364	O	GLU	A	48	8.254	-10.386	-13.267	1.00	21.91	O
ATOM	365	CB	GLU	A	48	11.920	-10.285	-13.101	1.00	25.59	C
ATOM	366	CG	GLU	A	48	12.994	-9.275	-13.584	1.00	34.29	C
ATOM	367	CD	GLU	A	48	13.681	-9.665	-14.925	1.00	37.71	C
ATOM	368	OE1	GLU	A	48	14.662	-10.459	-14.916	1.00	37.81	O
ATOM	369	OE2	GLU	A	48	13.290	-9.109	-15.986	1.00	39.96	O1-
ATOM	370	N	PHE	A	49	9.865	-11.982	-13.195	1.00	26.44	N
ATOM	371	CA	PHE	A	49	9.041	-13.162	-12.909	1.00	26.68	C
ATOM	372	C	PHE	A	49	7.528	-12.915	-12.813	1.00	27.60	C
ATOM	373	O	PHE	A	49	6.732	-13.630	-13.444	1.00	27.93	O
ATOM	374	CB	PHE	A	49	9.534	-13.796	-11.611	1.00	23.99	C
ATOM	375	CG	PHE	A	49	9.256	-15.241	-11.510	1.00	22.41	C
ATOM	376	CD1	PHE	A	49	8.042	-15.760	-11.905	1.00	25.30	C
ATOM	377	CD2	PHE	A	49	10.177	-16.079	-10.948	1.00	23.15	C
ATOM	378	CE1	PHE	A	49	7.754	-17.099	-11.725	1.00	26.44	C

ATOM	379	CE2	PHE	A	49	9.893	-17.410	-10.766	1.00	26.07	C
ATOM	380	CZ	PHE	A	49	8.682	-17.917	-11.151	1.00	23.64	C
ATOM	381	N	ALA	A	50	7.147	-12.051	-11.869	1.00	28.68	N
ATOM	382	CA	ALA	A	50	5.757	-11.693	-11.611	1.00	26.29	C
ATOM	383	C	ALA	A	50	5.093	-11.370	-12.939	1.00	26.64	C
ATOM	384	O	ALA	A	50	4.068	-11.963	-13.302	1.00	25.34	O
ATOM	385	CB	ALA	A	50	5.717	-10.487	-10.704	1.00	22.98	C
ATOM	386	N	LYS	A	51	5.773	-10.515	-13.703	1.00	26.55	N
ATOM	387	CA	LYS	A	51	5.334	-10.065	-15.024	1.00	24.67	C
ATOM	388	C	LYS	A	51	5.138	-11.225	-15.983	1.00	23.19	C
ATOM	389	O	LYS	A	51	4.298	-11.140	-16.871	1.00	22.00	O
ATOM	390	CB	LYS	A	51	6.366	-9.099	-15.636	1.00	25.82	C
ATOM	391	CG	LYS	A	51	6.392	-7.692	-15.057	1.00	20.83	C
ATOM	392	CD	LYS	A	51	7.753	-7.062	-15.237	1.00	15.07	C
ATOM	393	CE	LYS	A	51	7.799	-5.778	-14.475	1.00	17.03	C
ATOM	394	NZ	LYS	A	51	7.346	-5.991	-13.051	1.00	19.85	N1+
ATOM	395	N	THR	A	52	5.942	-12.276	-15.844	1.00	20.21	N
ATOM	396	CA	THR	A	52	5.860	-13.406	-16.750	1.00	20.84	C
ATOM	397	C	THR	A	52	4.763	-14.438	-16.407	1.00	23.73	C
ATOM	398	O	THR	A	52	4.255	-15.121	-17.310	1.00	25.44	O
ATOM	399	CB	THR	A	52	7.233	-14.084	-16.902	1.00	18.84	C
ATOM	400	CG2	THR	A	52	7.234	-15.510	-16.319	1.00	15.42	C
ATOM	401	OG1	THR	A	52	7.585	-14.107	-18.292	1.00	18.38	O
ATOM	402	N	CYS	A	53	4.305	-14.468	-15.154	1.00	24.15	N
ATOM	403	CA	CYS	A	53	3.020	-15.113	-14.852	1.00	23.39	C
ATOM	404	C	CYS	A	53	1.841	-14.134	-15.054	1.00	21.30	C
ATOM	405	O	CYS	A	53	0.704	-14.552	-15.268	1.00	21.30	O
ATOM	406	CB	CYS	A	53	3.000	-15.710	-13.428	1.00	24.03	C
ATOM	407	SG	CYS	A	53	4.336	-16.896	-13.023	1.00	22.23	S
ATOM	408	N	VAL	A	54	2.135	-12.843	-15.077	1.00	19.83	N
ATOM	409	CA	VAL	A	54	1.222	-11.856	-15.647	1.00	23.85	C
ATOM	410	C	VAL	A	54	0.895	-12.233	-17.099	1.00	24.27	C
ATOM	411	O	VAL	A	54	-0.282	-12.282	-17.504	1.00	24.50	O
ATOM	412	CB	VAL	A	54	1.865	-10.426	-15.619	1.00	26.97	C
ATOM	413	CG1	VAL	A	54	1.309	-9.538	-16.746	1.00	26.12	C
ATOM	414	CG2	VAL	A	54	1.638	-9.771	-14.250	1.00	30.36	C
ATOM	415	N	ALA	A	55	1.952	-12.457	-17.881	1.00	22.66	N
ATOM	416	CA	ALA	A	55	1.845	-12.830	-19.291	1.00	20.65	C
ATOM	417	C	ALA	A	55	0.971	-14.066	-19.412	1.00	21.32	C
ATOM	418	O	ALA	A	55	0.002	-14.111	-20.189	1.00	20.09	O
ATOM	419	CB	ALA	A	55	3.235	-13.120	-19.850	1.00	18.03	C
ATOM	420	N	ASP	A	56	1.236	-14.994	-18.498	1.00	22.03	N
ATOM	421	CA	ASP	A	56	0.765	-16.364	-18.591	1.00	20.78	C
ATOM	422	C	ASP	A	56	0.823	-16.974	-17.200	1.00	17.21	C
ATOM	423	O	ASP	A	56	1.892	-17.299	-16.698	1.00	13.60	O
ATOM	424	CB	ASP	A	56	1.667	-17.168	-19.555	1.00	21.11	C
ATOM	425	CG	ASP	A	56	0.882	-17.885	-20.641	1.00	20.85	C
ATOM	426	OD1	ASP	A	56	-0.136	-17.326	-21.131	1.00	18.50	O
ATOM	427	OD2	ASP	A	56	1.283	-19.021	-20.979	1.00	19.93	O1-
ATOM	428	N	GLU	A	57	-0.326	-17.055	-16.554	1.00	17.39	N
ATOM	429	CA	GLU	A	57	-0.486	-17.952	-15.418	1.00	19.41	C
ATOM	430	C	GLU	A	57	0.281	-19.246	-15.683	1.00	19.69	C
ATOM	431	O	GLU	A	57	1.357	-19.437	-15.115	1.00	18.89	O
ATOM	432	CB	GLU	A	57	-1.968	-18.291	-15.198	1.00	21.01	C
ATOM	433	CG	GLU	A	57	-2.926	-17.181	-15.550	1.00	18.07	C
ATOM	434	CD	GLU	A	57	-3.521	-16.521	-14.336	1.00	21.55	C
ATOM	435	OE1	GLU	A	57	-2.782	-15.874	-13.551	1.00	18.91	O
ATOM	436	OE2	GLU	A	57	-4.756	-16.620	-14.200	1.00	23.50	O1-
ATOM	437	N	SER	A	58	-0.138	-19.944	-16.752	1.00	20.54	N
ATOM	438	CA	SER	A	58	0.233	-21.343	-17.074	1.00	18.77	C
ATOM	439	C	SER	A	58	1.734	-21.685	-17.200	1.00	16.17	C
ATOM	440	O	SER	A	58	2.107	-22.848	-17.305	1.00	12.41	O
ATOM	441	CB	SER	A	58	-0.468	-21.771	-18.367	1.00	19.91	C
ATOM	442	OG	SER	A	58	-1.586	-20.943	-18.670	1.00	22.34	O
ATOM	443	N	ALA	A	59	2.580	-20.666	-17.191	1.00	16.30	N
ATOM	444	CA	ALA	A	59	4.000	-20.840	-17.363	1.00	19.02	C
ATOM	445	C	ALA	A	59	4.585	-21.590	-16.177	1.00	21.95	C
ATOM	446	O	ALA	A	59	4.252	-21.262	-15.033	1.00	23.97	O
ATOM	447	CB	ALA	A	59	4.640	-19.489	-17.474	1.00	22.09	C
ATOM	448	N	GLU	A	60	5.602	-22.419	-16.441	1.00	22.59	N
ATOM	449	CA	GLU	A	60	6.267	-23.242	-15.417	1.00	22.93	C

ATOM	450	C	GLU	A	60	6.511	-22.498	-14.113	1.00	24.76	C
ATOM	451	O	GLU	A	60	6.901	-21.338	-14.122	1.00	28.75	O
ATOM	452	CB	GLU	A	60	7.611	-23.778	-15.934	1.00	19.81	C
ATOM	453	CG	GLU	A	60	8.417	-24.596	-14.918	1.00	16.82	C
ATOM	454	CD	GLU	A	60	9.732	-25.160	-15.474	1.00	17.21	C
ATOM	455	OE1	GLU	A	60	10.733	-24.414	-15.489	1.00	14.77	O
ATOM	456	OE2	GLU	A	60	9.794	-26.376	-15.792	1.00	16.15	O1-
ATOM	457	N	ASN	A	61	6.248	-23.175	-13.002	1.00	25.15	N
ATOM	458	CA	ASN	A	61	6.546	-22.712	-11.638	1.00	26.26	C
ATOM	459	C	ASN	A	61	5.873	-21.448	-11.121	1.00	26.29	C
ATOM	460	O	ASN	A	61	6.007	-21.124	-9.945	1.00	26.16	O
ATOM	461	CB	ASN	A	61	8.054	-22.619	-11.376	1.00	25.05	C
ATOM	462	CG	ASN	A	61	8.730	-21.612	-12.252	1.00	25.32	C
ATOM	463	ND2	ASN	A	61	8.313	-20.363	-12.155	1.00	21.35	N
ATOM	464	OD1	ASN	A	61	9.503	-21.985	-13.129	1.00	26.74	O
ATOM	465	N	CYS	A	62	5.005	-20.840	-11.915	1.00	27.22	N
ATOM	466	CA	CYS	A	62	4.054	-19.901	-11.338	1.00	27.20	C
ATOM	467	C	CYS	A	62	3.419	-20.547	-10.106	1.00	27.53	C
ATOM	468	O	CYS	A	62	3.560	-20.010	-9.012	1.00	27.96	O
ATOM	469	CB	CYS	A	62	3.001	-19.538	-12.379	1.00	27.41	C
ATOM	470	SG	CYS	A	62	3.731	-18.673	-13.817	1.00	27.27	S
ATOM	471	N	ASP	A	63	3.166	-21.853	-10.247	1.00	29.32	N
ATOM	472	CA	ASP	A	63	2.519	-22.729	-9.259	1.00	29.88	C
ATOM	473	C	ASP	A	63	3.127	-22.814	-7.853	1.00	31.82	C
ATOM	474	O	ASP	A	63	2.702	-23.660	-7.046	1.00	30.96	O
ATOM	475	CB	ASP	A	63	2.437	-24.142	-9.824	1.00	29.57	C
ATOM	476	CG	ASP	A	63	1.214	-24.355	-10.687	1.00	31.17	C
ATOM	477	OD1	ASP	A	63	1.082	-23.702	-11.758	1.00	32.77	O
ATOM	478	OD2	ASP	A	63	0.381	-25.200	-10.295	1.00	32.47	O1-
ATOM	479	N	LYS	A	64	4.183	-22.033	-7.600	1.00	33.23	N
ATOM	480	CA	LYS	A	64	4.695	-21.785	-6.244	1.00	30.18	C
ATOM	481	C	LYS	A	64	3.561	-21.200	-5.372	1.00	29.80	C
ATOM	482	O	LYS	A	64	2.803	-20.316	-5.817	1.00	28.83	O
ATOM	483	CB	LYS	A	64	5.864	-20.782	-6.308	1.00	27.37	C
ATOM	484	CG	LYS	A	64	7.257	-21.397	-6.361	1.00	25.95	C
ATOM	485	CD	LYS	A	64	7.352	-22.527	-7.386	1.00	27.90	C
ATOM	486	CE	LYS	A	64	8.191	-23.714	-6.889	1.00	28.98	C
ATOM	487	NZ	LYS	A	64	9.640	-23.392	-6.604	1.00	27.67	N1+
ATOM	488	N	SER	A	65	3.474	-21.647	-4.120	1.00	28.75	N
ATOM	489	CA	SER	A	65	2.650	-20.934	-3.136	1.00	27.25	C
ATOM	490	C	SER	A	65	3.419	-19.725	-2.546	1.00	25.40	C
ATOM	491	O	SER	A	65	4.196	-19.869	-1.583	1.00	21.94	O
ATOM	492	CB	SER	A	65	2.188	-21.897	-2.019	1.00	28.94	C
ATOM	493	OG	SER	A	65	0.824	-22.307	-2.198	1.00	26.21	O
ATOM	494	N	LEU	A	66	3.329	-18.597	-3.256	1.00	21.69	N
ATOM	495	CA	LEU	A	66	3.971	-17.330	-2.891	1.00	18.29	C
ATOM	496	C	LEU	A	66	5.229	-17.507	-2.069	1.00	20.23	C
ATOM	497	O	LEU	A	66	6.283	-17.683	-2.652	1.00	23.75	O
ATOM	498	CB	LEU	A	66	2.982	-16.401	-2.180	1.00	12.64	C
ATOM	499	CG	LEU	A	66	3.160	-14.880	-2.253	1.00	5.07	C
ATOM	500	CD1	LEU	A	66	4.592	-14.537	-2.380	1.00	2.40	C
ATOM	501	CD2	LEU	A	66	2.384	-14.296	-3.399	1.00	2.17	C
ATOM	502	N	HIS	A	67	5.083	-17.646	-0.749	1.00	23.72	N
ATOM	503	CA	HIS	A	67	6.208	-17.826	0.192	1.00	25.77	C
ATOM	504	C	HIS	A	67	7.266	-18.712	-0.428	1.00	27.03	C
ATOM	505	O	HIS	A	67	8.407	-18.292	-0.612	1.00	28.17	O
ATOM	506	CB	HIS	A	67	5.757	-18.505	1.505	1.00	27.30	C
ATOM	507	CG	HIS	A	67	5.053	-17.596	2.474	1.00	28.03	C
ATOM	508	CD2	HIS	A	67	5.372	-16.363	2.940	1.00	25.15	C
ATOM	509	ND1	HIS	A	67	3.955	-18.009	3.206	1.00	25.30	N
ATOM	510	CE1	HIS	A	67	3.645	-17.076	4.091	1.00	24.34	C
ATOM	511	NE2	HIS	A	67	4.488	-16.070	3.947	1.00	23.45	N
ATOM	512	N	THR	A	68	6.833	-19.877	-0.895	1.00	28.20	N
ATOM	513	CA	THR	A	68	7.749	-20.853	-1.467	1.00	31.25	C
ATOM	514	C	THR	A	68	8.754	-20.271	-2.461	1.00	32.00	C
ATOM	515	O	THR	A	68	9.905	-20.750	-2.549	1.00	31.36	O
ATOM	516	CB	THR	A	68	6.986	-21.972	-2.142	1.00	32.39	C
ATOM	517	CG2	THR	A	68	7.624	-23.327	-1.793	1.00	31.68	C
ATOM	518	OG1	THR	A	68	5.617	-21.933	-1.697	1.00	35.75	O
ATOM	519	N	LEU	A	69	8.353	-19.227	-3.185	1.00	31.87	N
ATOM	520	CA	LEU	A	69	9.340	-18.500	-3.974	1.00	33.65	C

ATOM	521	C	LEU	A	69	10.314	-17.880	-2.982	1.00	32.74	C
ATOM	522	O	LEU	A	69	11.288	-18.548	-2.631	1.00	32.06	O
ATOM	523	CB	LEU	A	69	8.705	-17.444	-4.905	1.00	34.67	C
ATOM	524	CG	LEU	A	69	9.426	-17.171	-6.259	1.00	34.79	C
ATOM	525	CD1	LEU	A	69	10.395	-15.967	-6.148	1.00	32.65	C
ATOM	526	CD2	LEU	A	69	10.174	-18.427	-6.738	1.00	31.64	C
ATOM	527	N	PHE	A	70	9.943	-16.747	-2.374	1.00	30.96	N
ATOM	528	CA	PHE	A	70	10.788	-16.080	-1.365	1.00	30.54	C
ATOM	529	C	PHE	A	70	11.691	-17.099	-0.646	1.00	29.74	C
ATOM	530	O	PHE	A	70	12.906	-17.097	-0.807	1.00	26.41	O
ATOM	531	CB	PHE	A	70	9.932	-15.387	-0.288	1.00	30.25	C
ATOM	532	CG	PHE	A	70	9.227	-14.125	-0.737	1.00	28.46	C
ATOM	533	CD1	PHE	A	70	8.468	-14.109	-1.899	1.00	26.39	C
ATOM	534	CD2	PHE	A	70	9.075	-13.072	0.168	1.00	24.40	C
ATOM	535	CE1	PHE	A	70	7.554	-13.084	-2.130	1.00	27.08	C
ATOM	536	CE2	PHE	A	70	8.165	-12.058	-0.054	1.00	21.72	C
ATOM	537	CZ	PHE	A	70	7.399	-12.062	-1.196	1.00	25.72	C
ATOM	538	N	GLY	A	71	11.043	-18.122	-0.104	1.00	31.24	N
ATOM	539	CA	GLY	A	71	11.712	-19.075	0.764	1.00	31.89	C
ATOM	540	C	GLY	A	71	12.873	-19.697	0.044	1.00	31.60	C
ATOM	541	O	GLY	A	71	14.004	-19.640	0.536	1.00	31.27	O
ATOM	542	N	ASP	A	72	12.614	-19.987	-1.227	1.00	33.37	N
ATOM	543	CA	ASP	A	72	13.555	-20.627	-2.154	1.00	33.34	C
ATOM	544	C	ASP	A	72	14.353	-19.663	-3.083	1.00	32.34	C
ATOM	545	O	ASP	A	72	15.121	-20.113	-3.946	1.00	30.19	O
ATOM	546	CB	ASP	A	72	12.767	-21.662	-2.979	1.00	33.35	C
ATOM	547	CG	ASP	A	72	12.165	-22.762	-2.099	1.00	31.88	C
ATOM	548	OD1	ASP	A	72	12.805	-23.100	-1.077	1.00	30.99	O
ATOM	549	OD2	ASP	A	72	11.059	-23.269	-2.406	1.00	29.43	O1-
ATOM	550	N	LYS	A	73	14.183	-18.352	-2.870	1.00	31.11	N
ATOM	551	CA	LYS	A	73	14.958	-17.288	-3.538	1.00	27.64	C
ATOM	552	C	LYS	A	73	15.199	-16.145	-2.533	1.00	26.15	C
ATOM	553	O	LYS	A	73	14.585	-15.081	-2.619	1.00	23.20	O
ATOM	554	CB	LYS	A	73	14.187	-16.738	-4.757	1.00	28.01	C
ATOM	555	CG	LYS	A	73	14.083	-17.691	-5.962	1.00	25.72	C
ATOM	556	CD	LYS	A	73	14.918	-17.203	-7.143	1.00	24.18	C
ATOM	557	CE	LYS	A	73	14.754	-15.712	-7.383	1.00	23.68	C
ATOM	558	NZ	LYS	A	73	16.079	-15.048	-7.529	1.00	22.67	N1+
ATOM	559	N	LEU	A	74	16.031	-16.423	-1.533	1.00	27.33	N
ATOM	560	CA	LEU	A	74	16.166	-15.602	-0.312	1.00	26.12	C
ATOM	561	C	LEU	A	74	17.355	-16.178	0.438	1.00	23.46	C
ATOM	562	O	LEU	A	74	18.398	-15.545	0.518	1.00	21.59	O
ATOM	563	CB	LEU	A	74	14.922	-15.728	0.593	1.00	26.77	C
ATOM	564	CG	LEU	A	74	14.153	-14.538	1.199	1.00	25.70	C
ATOM	565	CD1	LEU	A	74	12.799	-15.077	1.659	1.00	26.20	C
ATOM	566	CD2	LEU	A	74	14.879	-13.871	2.381	1.00	22.43	C
ATOM	567	N	CYS	A	75	17.225	-17.448	0.826	1.00	24.52	N
ATOM	568	CA	CYS	A	75	18.313	-18.240	1.395	1.00	26.88	C
ATOM	569	C	CYS	A	75	19.554	-18.212	0.475	1.00	28.33	C
ATOM	570	O	CYS	A	75	20.714	-18.148	0.939	1.00	26.66	O
ATOM	571	CB	CYS	A	75	17.830	-19.698	1.633	1.00	26.77	C
ATOM	572	SG	CYS	A	75	17.685	-20.118	3.425	1.00	27.16	S
ATOM	573	N	THR	A	76	19.283	-18.088	-0.822	1.00	30.35	N
ATOM	574	CA	THR	A	76	20.287	-18.225	-1.866	1.00	30.59	C
ATOM	575	C	THR	A	76	21.471	-17.261	-1.658	1.00	30.26	C
ATOM	576	O	THR	A	76	22.293	-17.437	-0.739	1.00	29.82	O
ATOM	577	CB	THR	A	76	19.623	-18.024	-3.284	1.00	32.29	C
ATOM	578	CG2	THR	A	76	20.023	-19.164	-4.228	1.00	32.43	C
ATOM	579	OG1	THR	A	76	18.179	-17.994	-3.171	1.00	31.05	O
ATOM	580	N	VAL	A	77	21.493	-16.179	-2.427	1.00	31.21	N
ATOM	581	CA	VAL	A	77	22.661	-15.299	-2.455	1.00	30.79	C
ATOM	582	C	VAL	A	77	22.468	-14.103	-1.514	1.00	32.91	C
ATOM	583	O	VAL	A	77	23.392	-13.312	-1.272	1.00	33.22	O
ATOM	584	CB	VAL	A	77	22.944	-14.813	-3.893	1.00	28.48	C
ATOM	585	CG1	VAL	A	77	22.227	-13.486	-4.176	1.00	25.60	C
ATOM	586	CG2	VAL	A	77	24.439	-14.718	-4.118	1.00	24.59	C
ATOM	587	N	ALA	A	78	21.257	-13.954	-0.987	1.00	33.04	N
ATOM	588	CA	ALA	A	78	21.110	-13.066	0.134	1.00	33.55	C
ATOM	589	C	ALA	A	78	22.005	-13.706	1.199	1.00	35.33	C
ATOM	590	O	ALA	A	78	23.151	-13.260	1.362	1.00	36.95	O
ATOM	591	CB	ALA	A	78	19.660	-13.008	0.576	1.00	32.27	C

ATOM	592	N	THR	A	79	21.683	-14.963	1.521	1.00	34.35	N
ATOM	593	CA	THR	A	79	22.100	-15.570	2.779	1.00	33.26	C
ATOM	594	C	THR	A	79	23.555	-16.077	2.835	1.00	32.95	C
ATOM	595	O	THR	A	79	24.250	-15.840	3.828	1.00	29.56	O
ATOM	596	CB	THR	A	79	21.140	-16.723	3.185	1.00	34.83	C
ATOM	597	CG2	THR	A	79	21.198	-16.977	4.704	1.00	35.95	C
ATOM	598	OG1	THR	A	79	19.791	-16.383	2.832	1.00	32.22	O
ATOM	599	N	LEU	A	80	24.027	-16.777	1.798	1.00	32.03	N
ATOM	600	CA	LEU	A	80	25.417	-17.297	1.808	1.00	28.26	C
ATOM	601	C	LEU	A	80	26.496	-16.225	1.630	1.00	27.39	C
ATOM	602	O	LEU	A	80	27.663	-16.471	1.914	1.00	27.30	O
ATOM	603	CB	LEU	A	80	25.609	-18.388	0.750	1.00	27.14	C
ATOM	604	CG	LEU	A	80	26.202	-18.027	-0.613	1.00	23.17	C
ATOM	605	CD1	LEU	A	80	27.191	-19.114	-1.025	1.00	23.29	C
ATOM	606	CD2	LEU	A	80	25.084	-17.888	-1.649	1.00	22.37	C
ATOM	607	N	ARG	A	81	26.117	-15.063	1.102	1.00	28.16	N
ATOM	608	CA	ARG	A	81	26.911	-13.843	1.282	1.00	28.08	C
ATOM	609	C	ARG	A	81	26.719	-13.293	2.706	1.00	29.33	C
ATOM	610	O	ARG	A	81	27.463	-12.415	3.169	1.00	28.86	O
ATOM	611	CB	ARG	A	81	26.477	-12.780	0.281	1.00	25.69	C
ATOM	612	CG	ARG	A	81	27.446	-11.627	0.186	1.00	24.75	C
ATOM	613	CD	ARG	A	81	27.337	-10.950	-1.152	1.00	25.26	C
ATOM	614	NE	ARG	A	81	27.236	-11.935	-2.211	1.00	28.70	N
ATOM	615	CZ	ARG	A	81	28.043	-12.988	-2.337	1.00	32.72	C
ATOM	616	NH1	ARG	A	81	29.145	-13.080	-1.599	1.00	31.48	N1+
ATOM	617	NH2	ARG	A	81	27.766	-13.933	-3.239	1.00	35.72	N
ATOM	618	N	GLU	A	82	25.660	-13.760	3.361	1.00	29.80	N
ATOM	619	CA	GLU	A	82	25.385	-13.405	4.745	1.00	30.13	C
ATOM	620	C	GLU	A	82	25.702	-14.591	5.709	1.00	28.95	C
ATOM	621	O	GLU	A	82	24.836	-15.378	6.068	1.00	25.40	O
ATOM	622	CB	GLU	A	82	23.930	-12.881	4.802	1.00	29.79	C
ATOM	623	CG	GLU	A	82	22.913	-13.604	5.673	1.00	28.95	C
ATOM	624	CD	GLU	A	82	22.631	-12.867	6.965	1.00	28.32	C
ATOM	625	OE1	GLU	A	82	23.152	-11.733	7.119	1.00	27.70	O
ATOM	626	OE2	GLU	A	82	21.883	-13.416	7.814	1.00	23.91	O1-
ATOM	627	N	THR	A	83	26.989	-14.795	5.996	1.00	29.92	N
ATOM	628	CA	THR	A	83	27.418	-16.000	6.718	1.00	32.38	C
ATOM	629	C	THR	A	83	28.141	-15.685	8.052	1.00	35.54	C
ATOM	630	O	THR	A	83	29.381	-15.602	8.095	1.00	37.17	O
ATOM	631	CB	THR	A	83	28.363	-16.937	5.826	1.00	29.73	C
ATOM	632	CG2	THR	A	83	27.562	-17.986	5.086	1.00	28.72	C
ATOM	633	OG1	THR	A	83	29.107	-16.168	4.865	1.00	28.72	O
ATOM	634	N	TYR	A	84	27.418	-15.611	9.171	1.00	36.72	N
ATOM	635	CA	TYR	A	84	28.134	-15.232	10.392	1.00	36.41	C
ATOM	636	C	TYR	A	84	27.787	-15.855	11.752	1.00	37.17	C
ATOM	637	O	TYR	A	84	28.696	-16.145	12.553	1.00	37.81	O
ATOM	638	CB	TYR	A	84	28.155	-13.719	10.504	1.00	32.67	C
ATOM	639	CG	TYR	A	84	29.547	-13.173	10.612	1.00	27.81	C
ATOM	640	CD1	TYR	A	84	30.321	-13.442	11.728	1.00	26.38	C
ATOM	641	CD2	TYR	A	84	30.000	-12.224	9.714	1.00	27.01	C
ATOM	642	CE1	TYR	A	84	31.467	-12.758	11.964	1.00	24.78	C
ATOM	643	CE2	TYR	A	84	31.147	-11.539	9.938	1.00	24.86	C
ATOM	644	CZ	TYR	A	84	31.865	-11.794	11.072	1.00	25.15	C
ATOM	645	OH	TYR	A	84	32.909	-10.976	11.395	1.00	27.73	O
ATOM	646	N	GLY	A	85	26.498	-15.954	12.073	1.00	37.02	N
ATOM	647	CA	GLY	A	85	26.123	-16.752	13.222	1.00	36.20	C
ATOM	648	C	GLY	A	85	25.033	-16.151	14.070	1.00	35.50	C
ATOM	649	O	GLY	A	85	25.291	-15.646	15.165	1.00	36.73	O
ATOM	650	N	GLU	A	86	23.816	-16.174	13.539	1.00	34.43	N
ATOM	651	CA	GLU	A	86	22.602	-16.106	14.366	1.00	31.00	C
ATOM	652	C	GLU	A	86	21.465	-16.802	13.613	1.00	28.33	C
ATOM	653	O	GLU	A	86	20.837	-17.735	14.124	1.00	28.62	O
ATOM	654	CB	GLU	A	86	22.220	-14.655	14.676	1.00	29.50	C
ATOM	655	CG	GLU	A	86	21.084	-14.522	15.646	1.00	25.84	C
ATOM	656	CD	GLU	A	86	21.097	-15.620	16.687	1.00	26.43	C
ATOM	657	OE1	GLU	A	86	21.992	-15.623	17.568	1.00	22.42	O
ATOM	658	OE2	GLU	A	86	20.223	-16.512	16.584	1.00	27.71	O1-
ATOM	659	N	MET	A	87	21.326	-16.474	12.340	1.00	24.32	N
ATOM	660	CA	MET	A	87	20.476	-17.275	11.494	1.00	24.03	C
ATOM	661	C	MET	A	87	21.175	-18.576	11.102	1.00	23.82	C
ATOM	662	O	MET	A	87	21.884	-18.629	10.092	1.00	22.28	O

ATOM	663	CB	MET	A	87	20.062	-16.483	10.266	1.00	22.69	C
ATOM	664	CG	MET	A	87	19.281	-15.254	10.625	1.00	21.49	C
ATOM	665	SD	MET	A	87	17.968	-15.060	9.479	1.00	25.30	S
ATOM	666	CE	MET	A	87	17.164	-13.558	10.089	1.00	25.45	C
ATOM	667	N	ALA	A	88	21.100	-19.558	12.007	1.00	24.16	N
ATOM	668	CA	ALA	A	88	21.551	-20.939	11.769	1.00	23.40	C
ATOM	669	C	ALA	A	88	20.674	-21.671	10.750	1.00	22.19	C
ATOM	670	O	ALA	A	88	20.034	-22.659	11.074	1.00	19.67	O
ATOM	671	CB	ALA	A	88	21.562	-21.707	13.092	1.00	23.53	C
ATOM	672	N	ASP	A	89	20.914	-21.344	9.489	1.00	24.31	N
ATOM	673	CA	ASP	A	89	19.989	-21.540	8.373	1.00	26.76	C
ATOM	674	C	ASP	A	89	18.712	-22.355	8.559	1.00	27.24	C
ATOM	675	O	ASP	A	89	18.747	-23.479	9.048	1.00	28.36	O
ATOM	676	CB	ASP	A	89	20.745	-22.081	7.155	1.00	29.44	C
ATOM	677	CG	ASP	A	89	20.619	-21.162	5.954	1.00	33.40	C
ATOM	678	OD1	ASP	A	89	21.358	-20.136	5.934	1.00	34.86	O
ATOM	679	OD2	ASP	A	89	19.716	-21.401	5.103	1.00	29.72	O1-
ATOM	680	N	CYS	A	90	17.732	-21.971	7.752	1.00	27.38	N
ATOM	681	CA	CYS	A	90	16.343	-22.307	8.008	1.00	26.95	C
ATOM	682	C	CYS	A	90	15.605	-22.522	6.664	1.00	26.81	C
ATOM	683	O	CYS	A	90	14.461	-22.077	6.485	1.00	28.42	O
ATOM	684	CB	CYS	A	90	15.719	-21.154	8.799	1.00	27.53	C
ATOM	685	SG	CYS	A	90	14.094	-21.429	9.556	1.00	25.39	S
ATOM	686	N	CYS	A	91	16.248	-23.192	5.708	1.00	24.62	N
ATOM	687	CA	CYS	A	91	15.559	-23.491	4.457	1.00	22.81	C
ATOM	688	C	CYS	A	91	15.315	-24.990	4.337	1.00	21.96	C
ATOM	689	O	CYS	A	91	14.563	-25.413	3.449	1.00	19.33	O
ATOM	690	CB	CYS	A	91	16.330	-22.934	3.255	1.00	24.46	C
ATOM	691	SG	CYS	A	91	17.922	-22.131	3.674	1.00	26.72	S
ATOM	692	N	ALA	A	92	15.547	-25.641	5.480	1.00	20.50	N
ATOM	693	CA	ALA	A	92	15.453	-27.100	5.702	1.00	21.22	C
ATOM	694	C	ALA	A	92	14.711	-27.984	4.682	1.00	24.74	C
ATOM	695	O	ALA	A	92	15.053	-27.983	3.494	1.00	24.03	O
ATOM	696	CB	ALA	A	92	14.900	-27.358	7.109	1.00	19.84	C
ATOM	697	N	LYS	A	93	13.819	-28.862	5.165	1.00	29.36	N
ATOM	698	CA	LYS	A	93	13.030	-29.749	4.272	1.00	32.05	C
ATOM	699	C	LYS	A	93	11.829	-28.986	3.713	1.00	32.90	C
ATOM	700	O	LYS	A	93	10.689	-29.355	4.021	1.00	32.86	O
ATOM	701	CB	LYS	A	93	12.505	-30.991	5.016	1.00	31.93	C
ATOM	702	CG	LYS	A	93	13.547	-31.775	5.787	1.00	33.86	C
ATOM	703	CD	LYS	A	93	13.897	-33.068	5.060	1.00	41.47	C
ATOM	704	CE	LYS	A	93	13.058	-34.327	5.515	1.00	43.89	C
ATOM	705	NZ	LYS	A	93	13.324	-35.551	4.649	1.00	41.62	N1+
ATOM	706	N	GLN	A	94	12.106	-27.847	3.058	1.00	34.28	N
ATOM	707	CA	GLN	A	94	11.143	-27.119	2.211	1.00	33.24	C
ATOM	708	C	GLN	A	94	9.733	-27.305	2.726	1.00	34.19	C
ATOM	709	O	GLN	A	94	9.042	-28.292	2.385	1.00	33.84	O
ATOM	710	CB	GLN	A	94	11.233	-27.588	0.762	1.00	31.80	C
ATOM	711	CG	GLN	A	94	10.790	-26.549	-0.236	1.00	34.94	C
ATOM	712	CD	GLN	A	94	11.426	-26.732	-1.637	1.00	38.30	C
ATOM	713	NE2	GLN	A	94	12.641	-26.177	-1.815	1.00	40.46	N
ATOM	714	OE1	GLN	A	94	10.825	-27.321	-2.563	1.00	32.88	O
ATOM	715	N	GLU	A	95	9.332	-26.345	3.554	1.00	32.90	N
ATOM	716	CA	GLU	A	95	8.335	-26.553	4.596	1.00	29.83	C
ATOM	717	C	GLU	A	95	7.742	-25.193	4.953	1.00	27.35	C
ATOM	718	O	GLU	A	95	8.463	-24.205	5.067	1.00	27.18	O
ATOM	719	CB	GLU	A	95	8.999	-27.179	5.835	1.00	29.20	C
ATOM	720	CG	GLU	A	95	10.428	-26.672	6.091	1.00	31.06	C
ATOM	721	CD	GLU	A	95	11.023	-27.126	7.434	1.00	31.73	C
ATOM	722	OE1	GLU	A	95	10.421	-28.009	8.097	1.00	33.07	O
ATOM	723	OE2	GLU	A	95	12.075	-26.563	7.821	1.00	28.41	O1-
ATOM	724	N	PRO	A	96	6.413	-25.117	5.082	1.00	26.21	N
ATOM	725	CA	PRO	A	96	5.812	-24.684	6.341	1.00	24.52	C
ATOM	726	C	PRO	A	96	6.808	-24.184	7.407	1.00	25.14	C
ATOM	727	O	PRO	A	96	7.050	-22.970	7.514	1.00	25.18	O
ATOM	728	CB	PRO	A	96	5.052	-25.927	6.769	1.00	25.77	C
ATOM	729	CG	PRO	A	96	4.695	-26.630	5.390	1.00	25.29	C
ATOM	730	CD	PRO	A	96	5.461	-25.931	4.308	1.00	22.87	C
ATOM	731	N	GLU	A	97	7.471	-25.114	8.099	1.00	25.87	N
ATOM	732	CA	GLU	A	97	8.490	-24.774	9.105	1.00	24.65	C
ATOM	733	C	GLU	A	97	9.746	-24.064	8.538	1.00	24.75	C

ATOM	734	O	GLU	A	97	10.841	-24.176	9.090	1.00	25.54	O
ATOM	735	CB	GLU	A	97	8.900	-26.035	9.903	1.00	22.10	C
ATOM	736	CG	GLU	A	97	9.205	-25.768	11.382	1.00	20.67	C
ATOM	737	CD	GLU	A	97	9.771	-26.971	12.146	1.00	21.89	C
ATOM	738	OE1	GLU	A	97	9.336	-28.118	11.890	1.00	20.02	O
ATOM	739	OE2	GLU	A	97	10.584	-26.752	13.080	1.00	21.31	O1-
ATOM	740	N	ARG	A	98	9.603	-23.344	7.433	1.00	25.09	N
ATOM	741	CA	ARG	A	98	10.673	-22.458	7.010	1.00	25.81	C
ATOM	742	C	ARG	A	98	10.317	-21.131	7.623	1.00	25.39	C
ATOM	743	O	ARG	A	98	10.978	-20.710	8.581	1.00	24.60	O
ATOM	744	CB	ARG	A	98	10.787	-22.358	5.466	1.00	28.52	C
ATOM	745	CG	ARG	A	98	10.015	-21.212	4.761	1.00	29.53	C
ATOM	746	CD	ARG	A	98	9.578	-21.625	3.364	1.00	32.14	C
ATOM	747	NE	ARG	A	98	8.122	-21.618	3.201	1.00	35.46	N
ATOM	748	CZ	ARG	A	98	7.473	-22.269	2.232	1.00	36.58	C
ATOM	749	NH1	ARG	A	98	8.153	-23.041	1.390	1.00	34.88	N1+
ATOM	750	NH2	ARG	A	98	6.140	-22.181	2.122	1.00	35.51	N
ATOM	751	N	ASN	A	99	9.118	-20.641	7.289	1.00	24.15	N
ATOM	752	CA	ASN	A	99	8.828	-19.225	7.492	1.00	23.31	C
ATOM	753	C	ASN	A	99	9.235	-18.901	8.910	1.00	22.87	C
ATOM	754	O	ASN	A	99	10.205	-18.165	9.103	1.00	20.69	O
ATOM	755	CB	ASN	A	99	7.347	-18.902	7.287	1.00	22.49	C
ATOM	756	CG	ASN	A	99	7.134	-17.493	6.738	1.00	24.38	C
ATOM	757	ND2	ASN	A	99	7.943	-16.540	7.206	1.00	21.20	N
ATOM	758	OD1	ASN	A	99	6.321	-17.287	5.821	1.00	28.44	O
ATOM	759	N	GLU	A	100	8.818	-19.821	9.785	1.00	21.65	N
ATOM	760	CA	GLU	A	100	8.975	-19.687	11.215	1.00	20.63	C
ATOM	761	C	GLU	A	100	10.448	-19.660	11.578	1.00	22.84	C
ATOM	762	O	GLU	A	100	11.049	-18.584	11.656	1.00	23.88	O
ATOM	763	CB	GLU	A	100	8.255	-20.822	11.950	1.00	16.75	C
ATOM	764	CG	GLU	A	100	6.754	-20.854	11.705	1.00	18.79	C
ATOM	765	CD	GLU	A	100	6.355	-21.788	10.556	1.00	24.05	C
ATOM	766	OE1	GLU	A	100	6.735	-22.979	10.603	1.00	23.63	O
ATOM	767	OE2	GLU	A	100	5.629	-21.357	9.622	1.00	26.06	O1-
ATOM	768	N	CYS	A	101	11.073	-20.826	11.570	1.00	26.26	N
ATOM	769	CA	CYS	A	101	12.183	-21.078	12.477	1.00	29.17	C
ATOM	770	C	CYS	A	101	13.170	-19.962	12.458	1.00	28.71	C
ATOM	771	O	CYS	A	101	13.708	-19.631	13.507	1.00	29.61	O
ATOM	772	CB	CYS	A	101	12.927	-22.363	12.140	1.00	31.73	C
ATOM	773	SG	CYS	A	101	14.563	-21.967	11.457	1.00	33.00	S
ATOM	774	N	PHE	A	102	13.459	-19.419	11.274	1.00	29.99	N
ATOM	775	CA	PHE	A	102	14.339	-18.251	11.208	1.00	30.99	C
ATOM	776	C	PHE	A	102	13.937	-17.084	10.309	1.00	30.01	C
ATOM	777	O	PHE	A	102	14.198	-15.929	10.646	1.00	31.09	O
ATOM	778	CB	PHE	A	102	15.794	-18.669	10.927	1.00	29.15	C
ATOM	779	CG	PHE	A	102	16.643	-18.701	12.165	1.00	31.69	C
ATOM	780	CD1	PHE	A	102	16.206	-18.063	13.325	1.00	31.15	C
ATOM	781	CD2	PHE	A	102	17.771	-19.508	12.236	1.00	33.88	C
ATOM	782	CE1	PHE	A	102	16.858	-18.244	14.537	1.00	33.52	C
ATOM	783	CE2	PHE	A	102	18.441	-19.698	13.451	1.00	34.28	C
ATOM	784	CZ	PHE	A	102	17.979	-19.066	14.605	1.00	35.49	C
ATOM	785	N	LEU	A	103	13.308	-17.360	9.174	1.00	29.36	N
ATOM	786	CA	LEU	A	103	13.003	-16.279	8.237	1.00	26.14	C
ATOM	787	C	LEU	A	103	11.972	-15.389	8.900	1.00	25.93	C
ATOM	788	O	LEU	A	103	12.147	-14.171	8.921	1.00	25.78	O
ATOM	789	CB	LEU	A	103	12.461	-16.815	6.906	1.00	19.74	C
ATOM	790	CG	LEU	A	103	13.228	-17.942	6.214	1.00	12.38	C
ATOM	791	CD1	LEU	A	103	12.638	-18.120	4.854	1.00	9.21	C
ATOM	792	CD2	LEU	A	103	14.710	-17.659	6.156	1.00	6.56	C
ATOM	793	N	GLN	A	104	11.085	-16.014	9.683	1.00	25.30	N
ATOM	794	CA	GLN	A	104	10.052	-15.283	10.414	1.00	25.11	C
ATOM	795	C	GLN	A	104	10.454	-14.979	11.849	1.00	25.04	C
ATOM	796	O	GLN	A	104	9.587	-14.855	12.719	1.00	24.08	O
ATOM	797	CB	GLN	A	104	8.742	-16.057	10.419	1.00	24.18	C
ATOM	798	CG	GLN	A	104	7.502	-15.185	10.263	1.00	26.71	C
ATOM	799	CD	GLN	A	104	6.727	-14.995	11.555	1.00	27.66	C
ATOM	800	NE2	GLN	A	104	5.873	-13.976	11.579	1.00	27.08	N
ATOM	801	OE1	GLN	A	104	6.884	-15.758	12.520	1.00	26.58	O
ATOM	802	N	HIS	A	105	11.771	-14.903	12.102	1.00	27.00	N
ATOM	803	CA	HIS	A	105	12.310	-14.502	13.416	1.00	24.47	C
ATOM	804	C	HIS	A	105	13.366	-13.402	13.432	1.00	21.96	C

ATOM	805	O	HIS	A	105	14.561	-13.626	13.636	1.00	18.43	O
ATOM	806	CB	HIS	A	105	12.745	-15.726	14.239	1.00	22.38	C
ATOM	807	CG	HIS	A	105	11.579	-16.471	14.785	1.00	21.89	C
ATOM	808	CD2	HIS	A	105	10.375	-16.007	15.196	1.00	21.60	C
ATOM	809	ND1	HIS	A	105	11.379	-17.806	14.479	1.00	20.64	N
ATOM	810	CE1	HIS	A	105	10.095	-18.100	14.625	1.00	22.23	C
ATOM	811	NE2	HIS	A	105	9.467	-17.022	15.048	1.00	23.35	N
ATOM	812	N	LYS	A	106	12.917	-12.304	12.860	1.00	19.95	N
ATOM	813	CA	LYS	A	106	12.919	-11.020	13.530	1.00	19.97	C
ATOM	814	C	LYS	A	106	13.352	-11.055	14.998	1.00	20.41	C
ATOM	815	O	LYS	A	106	12.569	-11.484	15.844	1.00	19.74	O
ATOM	816	CB	LYS	A	106	11.509	-10.434	13.441	1.00	18.97	C
ATOM	817	CG	LYS	A	106	10.855	-10.624	12.077	1.00	14.34	C
ATOM	818	CD	LYS	A	106	9.593	-9.822	11.956	1.00	12.34	C
ATOM	819	CE	LYS	A	106	8.917	-10.071	10.618	1.00	15.93	C
ATOM	820	NZ	LYS	A	106	7.629	-9.296	10.461	1.00	19.28	N1+
ATOM	821	N	ASP	A	107	14.647	-10.804	15.235	1.00	20.45	N
ATOM	822	CA	ASP	A	107	15.129	-10.023	16.386	1.00	19.31	C
ATOM	823	C	ASP	A	107	14.254	-8.775	16.470	1.00	20.32	C
ATOM	824	O	ASP	A	107	13.725	-8.318	15.464	1.00	18.89	O
ATOM	825	CB	ASP	A	107	16.582	-9.589	16.168	1.00	18.38	C
ATOM	826	CG	ASP	A	107	17.324	-9.293	17.468	1.00	20.19	C
ATOM	827	OD1	ASP	A	107	16.972	-8.328	18.186	1.00	20.89	O
ATOM	828	OD2	ASP	A	107	18.343	-9.964	17.709	1.00	20.24	O1-
ATOM	829	N	ASP	A	108	14.062	-8.248	17.673	1.00	22.88	N
ATOM	830	CA	ASP	A	108	12.971	-7.310	17.867	1.00	24.38	C
ATOM	831	C	ASP	A	108	13.419	-5.855	17.972	1.00	28.19	C
ATOM	832	O	ASP	A	108	13.842	-5.278	16.979	1.00	34.68	O
ATOM	833	CB	ASP	A	108	12.119	-7.724	19.066	1.00	21.46	C
ATOM	834	CG	ASP	A	108	10.665	-7.323	18.893	1.00	21.67	C
ATOM	835	OD1	ASP	A	108	10.407	-6.411	18.098	1.00	20.61	O
ATOM	836	OD2	ASP	A	108	9.792	-7.901	19.583	1.00	24.35	O1-
ATOM	837	N	ASN	A	109	13.182	-5.218	19.110	1.00	28.47	N
ATOM	838	CA	ASN	A	109	13.326	-3.763	19.264	1.00	28.03	C
ATOM	839	C	ASN	A	109	14.728	-3.298	18.833	1.00	28.47	C
ATOM	840	O	ASN	A	109	15.003	-3.159	17.631	1.00	29.63	O
ATOM	841	CB	ASN	A	109	13.100	-3.463	20.742	1.00	30.55	C
ATOM	842	CG	ASN	A	109	12.170	-2.307	20.987	1.00	30.28	C
ATOM	843	ND2	ASN	A	109	11.029	-2.303	20.315	1.00	34.20	N
ATOM	844	OD1	ASN	A	109	12.411	-1.514	21.893	1.00	28.96	O
ATOM	845	N	PRO	A	110	15.632	-3.006	19.797	1.00	27.35	N
ATOM	846	CA	PRO	A	110	16.964	-3.597	19.834	1.00	27.24	C
ATOM	847	C	PRO	A	110	17.241	-4.929	19.113	1.00	29.36	C
ATOM	848	O	PRO	A	110	17.484	-6.001	19.740	1.00	29.54	O
ATOM	849	CB	PRO	A	110	17.284	-3.559	21.317	1.00	25.13	C
ATOM	850	CG	PRO	A	110	16.640	-2.142	21.702	1.00	25.75	C
ATOM	851	CD	PRO	A	110	15.683	-1.751	20.558	1.00	24.19	C
ATOM	852	N	ASN	A	111	17.144	-4.835	17.781	1.00	27.97	N
ATOM	853	CA	ASN	A	111	18.078	-5.469	16.846	1.00	24.32	C
ATOM	854	C	ASN	A	111	19.394	-4.725	16.826	1.00	22.19	C
ATOM	855	O	ASN	A	111	19.509	-3.710	17.495	1.00	19.34	O
ATOM	856	CB	ASN	A	111	17.515	-5.455	15.440	1.00	21.73	C
ATOM	857	CG	ASN	A	111	16.979	-4.106	15.050	1.00	19.05	C
ATOM	858	ND2	ASN	A	111	17.263	-3.075	15.851	1.00	14.84	N
ATOM	859	OD1	ASN	A	111	16.299	-3.992	14.035	1.00	22.36	O
ATOM	860	N	LEU	A	112	20.147	-4.978	15.759	1.00	24.65	N
ATOM	861	CA	LEU	A	112	21.611	-4.907	15.800	1.00	26.73	C
ATOM	862	C	LEU	A	112	22.172	-3.568	15.277	1.00	26.67	C
ATOM	863	O	LEU	A	112	21.839	-2.531	15.854	1.00	23.61	O
ATOM	864	CB	LEU	A	112	22.185	-6.148	15.089	1.00	27.52	C
ATOM	865	CG	LEU	A	112	23.017	-7.089	15.972	1.00	31.09	C
ATOM	866	CD1	LEU	A	112	22.946	-8.557	15.481	1.00	26.90	C
ATOM	867	CD2	LEU	A	112	24.458	-6.546	16.003	1.00	29.65	C
ATOM	868	N	PRO	A	113	23.112	-3.565	14.288	1.00	29.08	N
ATOM	869	CA	PRO	A	113	23.734	-2.245	14.101	1.00	31.20	C
ATOM	870	C	PRO	A	113	22.679	-1.238	13.619	1.00	33.56	C
ATOM	871	O	PRO	A	113	21.661	-1.636	12.981	1.00	31.23	O
ATOM	872	CB	PRO	A	113	24.818	-2.486	13.030	1.00	29.19	C
ATOM	873	CG	PRO	A	113	24.576	-3.877	12.496	1.00	28.17	C
ATOM	874	CD	PRO	A	113	23.241	-4.343	13.047	1.00	29.64	C
ATOM	875	N	ARG	A	114	22.928	0.050	13.928	1.00	33.99	N

ATOM	876	CA	ARG	A	114	21.881	1.077	13.890	1.00	32.55	C
ATOM	877	C	ARG	A	114	22.292	2.540	13.957	1.00	32.21	C
ATOM	878	O	ARG	A	114	21.575	3.391	13.430	1.00	31.11	O
ATOM	879	CB	ARG	A	114	20.905	0.809	15.017	1.00	33.18	C
ATOM	880	CG	ARG	A	114	19.953	-0.281	14.661	1.00	36.64	C
ATOM	881	CD	ARG	A	114	19.020	-0.467	15.750	1.00	39.87	C
ATOM	882	NE	ARG	A	114	18.517	0.826	16.159	1.00	43.15	N
ATOM	883	CZ	ARG	A	114	17.756	0.977	17.222	1.00	47.64	C
ATOM	884	NH1	ARG	A	114	17.324	-0.119	17.852	1.00	51.30	N1+
ATOM	885	NH2	ARG	A	114	17.373	2.192	17.608	1.00	50.22	N
ATOM	886	N	LEU	A	115	23.284	2.864	14.788	1.00	33.02	N
ATOM	887	CA	LEU	A	115	23.491	4.243	15.202	1.00	33.18	C
ATOM	888	C	LEU	A	115	23.305	5.255	14.059	1.00	34.71	C
ATOM	889	O	LEU	A	115	22.386	6.065	14.145	1.00	35.24	O
ATOM	890	CB	LEU	A	115	24.860	4.423	15.860	1.00	32.34	C
ATOM	891	CG	LEU	A	115	25.037	5.442	17.017	1.00	31.68	C
ATOM	892	CD1	LEU	A	115	26.534	5.671	17.168	1.00	29.02	C
ATOM	893	CD2	LEU	A	115	24.324	6.786	16.764	1.00	26.36	C
ATOM	894	N	VAL	A	116	24.007	5.019	12.919	1.00	35.67	N
ATOM	895	CA	VAL	A	116	24.061	5.935	11.756	1.00	36.09	C
ATOM	896	C	VAL	A	116	22.692	6.478	11.298	1.00	37.34	C
ATOM	897	O	VAL	A	116	21.657	6.293	11.959	1.00	39.54	O
ATOM	898	CB	VAL	A	116	24.705	5.248	10.482	1.00	34.24	C
ATOM	899	CG1	VAL	A	116	26.241	4.937	10.734	1.00	33.93	C
ATOM	900	CG2	VAL	A	116	23.974	3.954	10.123	1.00	30.72	C
ATOM	901	N	ARG	A	117	22.732	7.203	10.185	1.00	37.72	N
ATOM	902	CA	ARG	A	117	21.486	7.644	9.511	1.00	40.29	C
ATOM	903	C	ARG	A	117	21.917	8.611	8.413	1.00	39.62	C
ATOM	904	O	ARG	A	117	23.104	8.596	8.037	1.00	41.35	O
ATOM	905	CB	ARG	A	117	20.547	8.386	10.490	1.00	42.16	C
ATOM	906	CG	ARG	A	117	19.116	7.763	10.656	1.00	46.39	C
ATOM	907	CD	ARG	A	117	18.704	7.899	12.134	1.00	51.79	C
ATOM	908	NE	ARG	A	117	19.092	9.229	12.637	1.00	56.27	N
ATOM	909	CZ	ARG	A	117	18.282	10.024	13.353	1.00	57.56	C
ATOM	910	NH1	ARG	A	117	18.086	11.271	12.915	1.00	57.16	N1+
ATOM	911	NH2	ARG	A	117	18.065	9.782	14.657	1.00	55.96	N
ATOM	912	N	PRO	A	118	20.982	9.415	7.863	1.00	37.83	N
ATOM	913	CA	PRO	A	118	21.179	10.738	7.262	1.00	38.11	C
ATOM	914	C	PRO	A	118	21.640	11.818	8.236	1.00	36.72	C
ATOM	915	O	PRO	A	118	21.590	11.611	9.463	1.00	38.18	O
ATOM	916	CB	PRO	A	118	19.774	11.075	6.712	1.00	38.53	C
ATOM	917	CG	PRO	A	118	18.892	10.088	7.386	1.00	38.63	C
ATOM	918	CD	PRO	A	118	19.697	8.870	7.443	1.00	37.42	C
ATOM	919	N	GLU	A	119	21.806	13.037	7.693	1.00	34.77	N
ATOM	920	CA	GLU	A	119	22.310	14.182	8.455	1.00	33.84	C
ATOM	921	C	GLU	A	119	22.333	15.588	7.791	1.00	31.31	C
ATOM	922	O	GLU	A	119	21.800	15.762	6.680	1.00	27.96	O
ATOM	923	CB	GLU	A	119	23.684	13.859	9.039	1.00	34.16	C
ATOM	924	CG	GLU	A	119	23.650	13.731	10.573	1.00	29.57	C
ATOM	925	CD	GLU	A	119	23.678	15.084	11.263	1.00	27.59	C
ATOM	926	OE1	GLU	A	119	24.804	15.594	11.417	1.00	25.30	O
ATOM	927	OE2	GLU	A	119	22.602	15.581	11.689	1.00	21.70	O1-
ATOM	928	N	VAL	A	120	23.119	16.516	8.368	1.00	29.09	N
ATOM	929	CA	VAL	A	120	22.754	17.938	8.468	1.00	27.70	C
ATOM	930	C	VAL	A	120	21.995	18.387	7.264	1.00	27.84	C
ATOM	931	O	VAL	A	120	20.779	18.514	7.318	1.00	29.90	O
ATOM	932	CB	VAL	A	120	23.973	18.925	8.622	1.00	27.28	C
ATOM	933	CG1	VAL	A	120	23.965	19.580	10.005	1.00	25.95	C
ATOM	934	CG2	VAL	A	120	25.309	18.221	8.353	1.00	27.55	C
ATOM	935	N	ASP	A	121	22.688	18.398	6.131	1.00	28.02	N
ATOM	936	CA	ASP	A	121	22.234	19.108	4.946	1.00	26.82	C
ATOM	937	C	ASP	A	121	21.939	18.197	3.749	1.00	25.21	C
ATOM	938	O	ASP	A	121	21.035	18.483	2.953	1.00	23.24	O
ATOM	939	CB	ASP	A	121	23.247	20.212	4.560	1.00	25.99	C
ATOM	940	CG	ASP	A	121	24.676	19.899	5.019	1.00	26.35	C
ATOM	941	OD1	ASP	A	121	25.271	18.950	4.459	1.00	27.73	O
ATOM	942	OD2	ASP	A	121	25.210	20.583	5.923	1.00	21.53	O1-
ATOM	943	N	VAL	A	122	22.591	17.041	3.682	1.00	23.49	N
ATOM	944	CA	VAL	A	122	22.769	16.383	2.386	1.00	25.51	C
ATOM	945	C	VAL	A	122	21.644	15.468	1.927	1.00	26.41	C
ATOM	946	O	VAL	A	122	21.527	15.180	0.732	1.00	25.53	O

ATOM	947	CB	VAL	A	122	24.124	15.616	2.299	1.00	25.87	C
ATOM	948	CG1	VAL	A	122	24.962	15.857	3.561	1.00	27.67	C
ATOM	949	CG2	VAL	A	122	23.896	14.114	2.031	1.00	25.34	C
ATOM	950	N	MET	A	123	20.814	15.019	2.867	1.00	29.60	N
ATOM	951	CA	MET	A	123	19.863	13.932	2.601	1.00	30.15	C
ATOM	952	C	MET	A	123	18.835	14.384	1.578	1.00	32.67	C
ATOM	953	O	MET	A	123	18.100	13.549	1.034	1.00	33.77	O
ATOM	954	CB	MET	A	123	19.148	13.469	3.889	1.00	27.54	C
ATOM	955	CG	MET	A	123	17.910	14.282	4.295	1.00	25.66	C
ATOM	956	SD	MET	A	123	18.202	15.511	5.615	1.00	22.74	S
ATOM	957	CE	MET	A	123	16.615	16.318	5.641	1.00	22.28	C
ATOM	958	N	CYS	A	124	18.756	15.707	1.361	1.00	32.18	N
ATOM	959	CA	CYS	A	124	17.895	16.302	0.328	1.00	29.82	C
ATOM	960	C	CYS	A	124	18.423	15.917	-1.060	1.00	27.70	C
ATOM	961	O	CYS	A	124	19.457	16.417	-1.503	1.00	27.67	O
ATOM	962	CB	CYS	A	124	17.879	17.819	0.455	1.00	27.21	C
ATOM	963	SG	CYS	A	124	17.768	18.608	-1.174	1.00	27.90	S
ATOM	964	N	ALA	A	126	16.357	14.257	-3.975	1.00	22.43	N
ATOM	965	CA	ALA	A	126	15.531	13.862	-5.118	1.00	26.10	C
ATOM	966	C	ALA	A	126	16.012	14.663	-6.335	1.00	27.83	C
ATOM	967	O	ALA	A	126	15.423	15.699	-6.716	1.00	28.31	O
ATOM	968	CB	ALA	A	126	14.054	14.116	-4.848	1.00	27.88	C
ATOM	969	N	PHE	A	127	17.206	14.284	-6.793	1.00	27.19	N
ATOM	970	CA	PHE	A	127	17.877	14.923	-7.916	1.00	25.57	C
ATOM	971	C	PHE	A	127	18.309	13.827	-8.896	1.00	25.18	C
ATOM	972	O	PHE	A	127	17.915	13.833	-10.062	1.00	24.40	O
ATOM	973	CB	PHE	A	127	19.107	15.705	-7.422	1.00	25.50	C
ATOM	974	CG	PHE	A	127	18.819	16.683	-6.298	1.00	24.31	C
ATOM	975	CD1	PHE	A	127	17.616	17.361	-6.224	1.00	23.10	C
ATOM	976	CD2	PHE	A	127	19.761	16.911	-5.307	1.00	24.98	C
ATOM	977	CE1	PHE	A	127	17.356	18.229	-5.169	1.00	24.24	C
ATOM	978	CE2	PHE	A	127	19.507	17.792	-4.260	1.00	23.55	C
ATOM	979	CZ	PHE	A	127	18.304	18.442	-4.188	1.00	22.96	C
ATOM	980	N	HIS	A	128	19.093	12.872	-8.395	1.00	23.97	N
ATOM	981	CA	HIS	A	128	19.603	11.748	-9.190	1.00	25.06	C
ATOM	982	C	HIS	A	128	19.666	10.507	-8.299	1.00	25.79	C
ATOM	983	O	HIS	A	128	20.736	9.885	-8.155	1.00	24.46	O
ATOM	984	CB	HIS	A	128	21.006	12.060	-9.762	1.00	26.48	C
ATOM	985	CG	HIS	A	128	21.630	10.926	-10.528	1.00	26.14	C
ATOM	986	CD2	HIS	A	128	21.599	10.603	-11.842	1.00	26.98	C
ATOM	987	ND1	HIS	A	128	22.404	9.955	-9.919	1.00	25.60	N
ATOM	988	CE1	HIS	A	128	22.814	9.086	-10.824	1.00	25.56	C
ATOM	989	NE2	HIS	A	128	22.341	9.456	-11.999	1.00	26.11	N
ATOM	990	N	ASP	A	129	18.631	10.376	-7.473	1.00	25.20	N
ATOM	991	CA	ASP	A	129	18.171	9.095	-6.944	1.00	23.48	C
ATOM	992	C	ASP	A	129	17.157	9.345	-5.843	1.00	24.69	C
ATOM	993	O	ASP	A	129	17.123	10.429	-5.245	1.00	22.84	O
ATOM	994	CB	ASP	A	129	19.312	8.207	-6.401	1.00	22.35	C
ATOM	995	CG	ASP	A	129	20.159	8.879	-5.310	1.00	19.90	C
ATOM	996	OD1	ASP	A	129	19.796	9.960	-4.801	1.00	16.62	O
ATOM	997	OD2	ASP	A	129	21.216	8.304	-4.963	1.00	18.41	O1-
ATOM	998	N	GLU	A	131	16.294	6.107	-4.845	1.00	26.76	N
ATOM	999	CA	GLU	A	131	16.936	4.947	-4.238	1.00	26.85	C
ATOM	1000	C	GLU	A	131	17.501	5.427	-2.883	1.00	26.10	C
ATOM	1001	O	GLU	A	131	17.117	4.893	-1.861	1.00	25.45	O
ATOM	1002	CB	GLU	A	131	18.035	4.384	-5.180	1.00	25.89	C
ATOM	1003	CG	GLU	A	131	17.551	3.445	-6.329	1.00	21.04	C
ATOM	1004	CD	GLU	A	131	16.340	3.971	-7.147	1.00	22.14	C
ATOM	1005	OE1	GLU	A	131	16.533	4.847	-8.019	1.00	19.96	O
ATOM	1006	OE2	GLU	A	131	15.222	3.409	-7.018	1.00	19.19	O1-
ATOM	1007	N	GLU	A	132	18.176	6.583	-2.862	1.00	27.14	N
ATOM	1008	CA	GLU	A	132	18.411	7.302	-1.593	1.00	27.48	C
ATOM	1009	C	GLU	A	132	17.082	7.842	-1.037	1.00	28.11	C
ATOM	1010	O	GLU	A	132	16.106	7.962	-1.754	1.00	24.38	O
ATOM	1011	CB	GLU	A	132	19.392	8.487	-1.758	1.00	26.09	C
ATOM	1012	CG	GLU	A	132	20.903	8.155	-1.682	1.00	25.28	C
ATOM	1013	CD	GLU	A	132	21.435	7.896	-0.264	1.00	21.57	C
ATOM	1014	OE1	GLU	A	132	21.255	6.778	0.262	1.00	19.27	O
ATOM	1015	OE2	GLU	A	132	22.139	8.767	0.272	1.00	15.77	O1-
ATOM	1016	N	THR	A	133	17.137	8.383	0.170	1.00	30.85	N
ATOM	1017	CA	THR	A	133	15.943	8.621	0.974	1.00	33.25	C

ATOM	1018	C	THR	A	133	14.702	7.774	0.628	1.00	34.75	C
ATOM	1019	O	THR	A	133	14.606	6.619	1.090	1.00	36.23	O
ATOM	1020	CB	THR	A	133	15.615	10.107	0.979	1.00	34.23	C
ATOM	1021	CG2	THR	A	133	16.767	10.868	1.680	1.00	36.08	C
ATOM	1022	OG1	THR	A	133	15.497	10.586	-0.370	1.00	35.21	O
ATOM	1023	N	PHE	A	134	13.798	8.301	-0.209	1.00	34.14	N
ATOM	1024	CA	PHE	A	134	12.474	7.689	-0.444	1.00	32.44	C
ATOM	1025	C	PHE	A	134	12.485	6.162	-0.360	1.00	32.71	C
ATOM	1026	O	PHE	A	134	11.952	5.604	0.584	1.00	35.71	O
ATOM	1027	CB	PHE	A	134	11.886	8.175	-1.787	1.00	30.94	C
ATOM	1028	CG	PHE	A	134	11.252	7.086	-2.630	1.00	29.00	C
ATOM	1029	CD1	PHE	A	134	10.070	6.474	-2.245	1.00	30.88	C
ATOM	1030	CD2	PHE	A	134	11.853	6.672	-3.805	1.00	28.45	C
ATOM	1031	CE1	PHE	A	134	9.508	5.473	-3.015	1.00	29.95	C
ATOM	1032	CE2	PHE	A	134	11.302	5.674	-4.585	1.00	28.90	C
ATOM	1033	CZ	PHE	A	134	10.132	5.074	-4.191	1.00	31.63	C
ATOM	1034	N	LEU	A	135	13.227	5.508	-1.242	1.00	32.49	N
ATOM	1035	CA	LEU	A	135	13.400	4.061	-1.193	1.00	32.55	C
ATOM	1036	C	LEU	A	135	14.020	3.666	0.150	1.00	32.40	C
ATOM	1037	O	LEU	A	135	13.384	2.984	0.946	1.00	33.86	O
ATOM	1038	CB	LEU	A	135	14.295	3.623	-2.362	1.00	34.15	C
ATOM	1039	CG	LEU	A	135	14.898	2.211	-2.532	1.00	37.12	C
ATOM	1040	CD1	LEU	A	135	14.673	1.676	-3.994	1.00	35.21	C
ATOM	1041	CD2	LEU	A	135	16.396	2.278	-2.232	1.00	33.42	C
ATOM	1042	N	LYS	A	136	15.169	4.258	0.477	1.00	32.96	N
ATOM	1043	CA	LYS	A	136	15.967	3.890	1.662	1.00	31.27	C
ATOM	1044	C	LYS	A	136	15.382	4.437	2.974	1.00	30.10	C
ATOM	1045	O	LYS	A	136	16.095	4.623	3.975	1.00	27.30	O
ATOM	1046	CB	LYS	A	136	17.429	4.370	1.501	1.00	30.80	C
ATOM	1047	CG	LYS	A	136	18.317	3.488	0.613	1.00	25.87	C
ATOM	1048	CD	LYS	A	136	19.724	4.099	0.430	1.00	25.64	C
ATOM	1049	CE	LYS	A	136	20.846	3.309	1.182	1.00	21.64	C
ATOM	1050	NZ	LYS	A	136	22.219	3.921	1.063	1.00	11.74	N1+
ATOM	1051	N	LYS	A	137	14.073	4.642	2.986	1.00	28.98	N
ATOM	1052	CA	LYS	A	137	13.340	4.610	4.251	1.00	27.29	C
ATOM	1053	C	LYS	A	137	12.719	3.231	4.562	1.00	25.01	C
ATOM	1054	O	LYS	A	137	11.769	3.148	5.343	1.00	19.88	O
ATOM	1055	CB	LYS	A	137	12.267	5.703	4.278	1.00	27.89	C
ATOM	1056	CG	LYS	A	137	11.043	5.458	3.424	1.00	25.43	C
ATOM	1057	CD	LYS	A	137	10.013	6.549	3.657	1.00	24.61	C
ATOM	1058	CE	LYS	A	137	9.532	6.581	5.121	1.00	25.80	C
ATOM	1059	NZ	LYS	A	137	10.478	7.205	6.080	1.00	22.10	N1+
ATOM	1060	N	TYR	A	138	13.261	2.170	3.944	1.00	23.60	N
ATOM	1061	CA	TYR	A	138	12.987	0.797	4.367	1.00	23.57	C
ATOM	1062	C	TYR	A	138	14.201	-0.014	4.898	1.00	25.14	C
ATOM	1063	O	TYR	A	138	14.157	-0.518	6.019	1.00	26.51	O
ATOM	1064	CB	TYR	A	138	12.287	0.013	3.262	1.00	23.90	C
ATOM	1065	CG	TYR	A	138	11.095	0.708	2.626	1.00	23.12	C
ATOM	1066	CD1	TYR	A	138	10.272	1.532	3.375	1.00	21.31	C
ATOM	1067	CD2	TYR	A	138	10.950	0.725	1.238	1.00	20.04	C
ATOM	1068	CE1	TYR	A	138	9.396	2.388	2.764	1.00	21.87	C
ATOM	1069	CE2	TYR	A	138	10.096	1.584	0.627	1.00	18.89	C
ATOM	1070	CZ	TYR	A	138	9.347	2.451	1.385	1.00	19.37	C
ATOM	1071	OH	TYR	A	138	8.863	3.599	0.796	1.00	16.36	O
ATOM	1072	N	LEU	A	139	15.348	-0.004	4.229	1.00	26.31	N
ATOM	1073	CA	LEU	A	139	16.544	-0.492	4.932	1.00	28.30	C
ATOM	1074	C	LEU	A	139	16.903	0.423	6.137	1.00	30.40	C
ATOM	1075	O	LEU	A	139	18.050	0.459	6.603	1.00	33.77	O
ATOM	1076	CB	LEU	A	139	17.764	-0.643	3.987	1.00	23.98	C
ATOM	1077	CG	LEU	A	139	18.987	-1.356	4.621	1.00	21.06	C
ATOM	1078	CD1	LEU	A	139	19.161	-2.769	4.075	1.00	15.84	C
ATOM	1079	CD2	LEU	A	139	20.249	-0.513	4.429	1.00	18.03	C
ATOM	1080	N	TYR	A	140	15.914	1.125	6.676	1.00	28.28	N
ATOM	1081	CA	TYR	A	140	16.160	2.032	7.782	1.00	27.48	C
ATOM	1082	C	TYR	A	140	14.903	2.160	8.640	1.00	26.31	C
ATOM	1083	O	TYR	A	140	14.644	1.316	9.484	1.00	25.70	O
ATOM	1084	CB	TYR	A	140	16.555	3.370	7.196	1.00	29.37	C
ATOM	1085	CG	TYR	A	140	18.029	3.568	7.070	1.00	32.07	C
ATOM	1086	CD1	TYR	A	140	18.907	2.754	7.774	1.00	32.26	C
ATOM	1087	CD2	TYR	A	140	18.511	4.785	6.615	1.00	35.07	C
ATOM	1088	CE1	TYR	A	140	20.189	3.177	8.085	1.00	31.31	C

ATOM	1089	CE2	TYR	A	140	19.788	5.220	6.938	1.00	34.45	C
ATOM	1090	CZ	TYR	A	140	20.604	4.429	7.691	1.00	30.17	C
ATOM	1091	OH	TYR	A	140	21.706	5.009	8.252	1.00	30.52	O
ATOM	1092	N	GLU	A	141	13.993	3.007	8.184	1.00	27.43	N
ATOM	1093	CA	GLU	A	141	12.635	3.080	8.702	1.00	26.66	C
ATOM	1094	C	GLU	A	141	11.830	1.793	8.474	1.00	25.94	C
ATOM	1095	O	GLU	A	141	10.589	1.841	8.394	1.00	24.42	O
ATOM	1096	CB	GLU	A	141	11.920	4.269	8.058	1.00	27.66	C
ATOM	1097	CG	GLU	A	141	12.753	5.571	8.070	1.00	28.85	C
ATOM	1098	CD	GLU	A	141	12.126	6.665	8.930	1.00	30.04	C
ATOM	1099	OE1	GLU	A	141	12.059	6.463	10.169	1.00	28.05	O
ATOM	1100	OE2	GLU	A	141	11.684	7.706	8.368	1.00	27.92	O1-
ATOM	1101	N	ILE	A	142	12.543	0.668	8.301	1.00	25.02	N
ATOM	1102	CA	ILE	A	142	11.959	-0.670	8.411	1.00	23.92	C
ATOM	1103	C	ILE	A	142	12.891	-1.879	8.483	1.00	22.66	C
ATOM	1104	O	ILE	A	142	12.422	-3.019	8.460	1.00	21.14	O
ATOM	1105	CB	ILE	A	142	10.920	-0.960	7.307	1.00	25.56	C
ATOM	1106	CG1	ILE	A	142	9.839	-1.855	7.893	1.00	31.26	C
ATOM	1107	CG2	ILE	A	142	11.533	-1.747	6.136	1.00	26.16	C
ATOM	1108	CD1	ILE	A	142	9.808	-1.835	9.391	1.00	32.34	C
ATOM	1109	N	ALA	A	143	14.192	-1.655	8.574	1.00	21.53	N
ATOM	1110	CA	ALA	A	143	15.080	-2.739	8.995	1.00	21.28	C
ATOM	1111	C	ALA	A	143	15.259	-2.555	10.491	1.00	21.40	C
ATOM	1112	O	ALA	A	143	15.077	-3.478	11.295	1.00	20.55	O
ATOM	1113	CB	ALA	A	143	16.437	-2.637	8.279	1.00	20.32	C
ATOM	1114	N	ARG	A	144	15.496	-1.300	10.850	1.00	21.00	N
ATOM	1115	CA	ARG	A	144	15.726	-0.906	12.216	1.00	21.33	C
ATOM	1116	C	ARG	A	144	14.498	-1.163	13.053	1.00	21.04	C
ATOM	1117	O	ARG	A	144	13.397	-0.738	12.694	1.00	20.32	O
ATOM	1118	CB	ARG	A	144	16.052	0.577	12.271	1.00	21.01	C
ATOM	1119	CG	ARG	A	144	17.510	0.863	12.247	1.00	17.71	C
ATOM	1120	CD	ARG	A	144	18.023	1.041	10.857	1.00	17.22	C
ATOM	1121	NE	ARG	A	144	18.645	2.342	10.630	1.00	18.81	N
ATOM	1122	CZ	ARG	A	144	19.496	2.950	11.447	1.00	17.78	C
ATOM	1123	NH1	ARG	A	144	19.398	2.791	12.749	1.00	22.32	N1+
ATOM	1124	NH2	ARG	A	144	20.194	3.978	11.001	1.00	19.08	N
ATOM	1125	N	ARG	A	145	14.686	-1.933	14.117	1.00	22.67	N
ATOM	1126	CA	ARG	A	145	13.838	-1.888	15.297	1.00	22.80	C
ATOM	1127	C	ARG	A	145	12.341	-1.995	14.978	1.00	23.74	C
ATOM	1128	O	ARG	A	145	11.492	-1.697	15.827	1.00	24.29	O
ATOM	1129	CB	ARG	A	145	14.150	-0.595	16.060	1.00	23.74	C
ATOM	1130	CG	ARG	A	145	13.284	0.605	15.663	1.00	24.56	C
ATOM	1131	CD	ARG	A	145	14.041	1.882	15.206	1.00	23.54	C
ATOM	1132	NE	ARG	A	145	13.036	2.868	14.811	1.00	23.80	N
ATOM	1133	CZ	ARG	A	145	13.214	3.859	13.954	1.00	24.48	C
ATOM	1134	NH1	ARG	A	145	14.272	4.656	14.069	1.00	24.11	N1+
ATOM	1135	NH2	ARG	A	145	12.154	4.288	13.278	1.00	24.06	N
ATOM	1136	N	HIS	A	146	12.021	-2.380	13.739	1.00	23.24	N
ATOM	1137	CA	HIS	A	146	10.633	-2.505	13.276	1.00	21.90	C
ATOM	1138	C	HIS	A	146	10.413	-3.719	12.380	1.00	19.01	C
ATOM	1139	O	HIS	A	146	9.649	-3.649	11.433	1.00	15.22	O
ATOM	1140	CB	HIS	A	146	10.196	-1.244	12.519	1.00	21.14	C
ATOM	1141	CG	HIS	A	146	10.226	-0.013	13.357	1.00	23.07	C
ATOM	1142	CD2	HIS	A	146	10.883	1.158	13.170	1.00	24.02	C
ATOM	1143	ND1	HIS	A	146	9.778	0.000	14.658	1.00	21.23	N
ATOM	1144	CE1	HIS	A	146	10.178	1.100	15.251	1.00	24.29	C
ATOM	1145	NE2	HIS	A	146	10.844	1.831	14.373	1.00	24.47	N
ATOM	1146	N	PRO	A	147	10.896	-4.885	12.783	1.00	18.32	N
ATOM	1147	CA	PRO	A	147	10.624	-5.945	11.843	1.00	19.37	C
ATOM	1148	C	PRO	A	147	9.128	-6.280	11.753	1.00	24.48	C
ATOM	1149	O	PRO	A	147	8.718	-6.993	10.833	1.00	27.95	O
ATOM	1150	CB	PRO	A	147	11.461	-7.097	12.365	1.00	17.35	C
ATOM	1151	CG	PRO	A	147	12.544	-6.430	13.108	1.00	17.68	C
ATOM	1152	CD	PRO	A	147	11.866	-5.332	13.806	1.00	18.03	C
ATOM	1153	N	TYR	A	148	8.294	-5.713	12.629	1.00	24.82	N
ATOM	1154	CA	TYR	A	148	6.868	-6.045	12.564	1.00	25.01	C
ATOM	1155	C	TYR	A	148	6.009	-4.990	11.846	1.00	26.88	C
ATOM	1156	O	TYR	A	148	5.048	-5.353	11.167	1.00	29.08	O
ATOM	1157	CB	TYR	A	148	6.326	-6.357	13.960	1.00	21.84	C
ATOM	1158	CG	TYR	A	148	6.986	-7.573	14.586	1.00	20.84	C
ATOM	1159	CD1	TYR	A	148	8.272	-7.502	15.093	1.00	21.27	C

ATOM	1160	CD2	TYR	A	148	6.368	-8.812	14.576	1.00	21.92	C
ATOM	1161	CE1	TYR	A	148	8.926	-8.629	15.558	1.00	18.20	C
ATOM	1162	CE2	TYR	A	148	7.019	-9.947	15.036	1.00	19.43	C
ATOM	1163	CZ	TYR	A	148	8.298	-9.843	15.521	1.00	17.54	C
ATOM	1164	OH	TYR	A	148	8.966	-10.954	15.973	1.00	19.26	O
ATOM	1165	N	PHE	A	149	6.519	-3.755	11.776	1.00	26.54	N
ATOM	1166	CA	PHE	A	149	5.862	-2.630	11.080	1.00	23.95	C
ATOM	1167	C	PHE	A	149	4.992	-3.027	9.893	1.00	23.50	C
ATOM	1168	O	PHE	A	149	5.444	-3.643	8.915	1.00	20.73	O
ATOM	1169	CB	PHE	A	149	6.892	-1.578	10.614	1.00	19.95	C
ATOM	1170	CG	PHE	A	149	6.368	-0.157	10.584	1.00	18.95	C
ATOM	1171	CD1	PHE	A	149	5.244	0.189	9.840	1.00	21.19	C
ATOM	1172	CD2	PHE	A	149	7.044	0.853	11.240	1.00	17.97	C
ATOM	1173	CE1	PHE	A	149	4.814	1.514	9.748	1.00	17.03	C
ATOM	1174	CE2	PHE	A	149	6.613	2.177	11.152	1.00	17.64	C
ATOM	1175	CZ	PHE	A	149	5.501	2.501	10.402	1.00	13.77	C
ATOM	1176	N	ALA	A	151	3.646	-2.885	6.915	1.00	16.85	N
ATOM	1177	CA	ALA	A	151	3.539	-2.791	5.463	1.00	14.78	C
ATOM	1178	C	ALA	A	151	2.681	-1.614	4.972	1.00	15.60	C
ATOM	1179	O	ALA	A	151	3.223	-0.518	4.831	1.00	17.98	O
ATOM	1180	CB	ALA	A	151	3.038	-4.104	4.884	1.00	13.97	C
ATOM	1181	N	PRO	A	152	1.346	-1.776	4.762	1.00	13.15	N
ATOM	1182	CA	PRO	A	152	0.722	-0.739	3.932	1.00	9.23	C
ATOM	1183	C	PRO	A	152	0.901	0.647	4.494	1.00	9.42	C
ATOM	1184	O	PRO	A	152	1.203	1.559	3.742	1.00	12.31	O
ATOM	1185	CB	PRO	A	152	-0.746	-1.137	3.863	1.00	3.96	C
ATOM	1186	CG	PRO	A	152	-0.950	-1.981	4.978	1.00	9.07	C
ATOM	1187	CD	PRO	A	152	0.329	-2.722	5.244	1.00	12.15	C
ATOM	1188	N	GLU	A	153	1.031	0.730	5.816	1.00	11.50	N
ATOM	1189	CA	GLU	A	153	1.234	2.006	6.514	1.00	9.86	C
ATOM	1190	C	GLU	A	153	2.605	2.638	6.305	1.00	10.68	C
ATOM	1191	O	GLU	A	153	2.752	3.857	6.337	1.00	9.78	O
ATOM	1192	CB	GLU	A	153	0.971	1.828	7.995	1.00	5.51	C
ATOM	1193	CG	GLU	A	153	-0.476	2.003	8.348	1.00	7.11	C
ATOM	1194	CD	GLU	A	153	-0.969	3.409	8.114	1.00	7.65	C
ATOM	1195	OE1	GLU	A	153	-0.136	4.313	8.022	1.00	5.80	O
ATOM	1196	OE2	GLU	A	153	-2.194	3.611	8.020	1.00	11.12	O1-
ATOM	1197	N	LEU	A	154	3.597	1.806	6.027	1.00	13.56	N
ATOM	1198	CA	LEU	A	154	4.861	2.287	5.484	1.00	17.58	C
ATOM	1199	C	LEU	A	154	4.729	2.816	4.045	1.00	19.77	C
ATOM	1200	O	LEU	A	154	5.245	3.881	3.731	1.00	19.71	O
ATOM	1201	CB	LEU	A	154	5.914	1.189	5.541	1.00	14.47	C
ATOM	1202	CG	LEU	A	154	7.016	1.644	6.467	1.00	16.08	C
ATOM	1203	CD1	LEU	A	154	8.162	0.670	6.454	1.00	16.69	C
ATOM	1204	CD2	LEU	A	154	7.461	3.019	6.022	1.00	19.40	C
ATOM	1205	N	LEU	A	155	3.982	2.112	3.201	1.00	20.63	N
ATOM	1206	CA	LEU	A	155	3.669	2.622	1.872	1.00	22.58	C
ATOM	1207	C	LEU	A	155	2.916	3.949	2.012	1.00	25.56	C
ATOM	1208	O	LEU	A	155	3.099	4.850	1.190	1.00	27.00	O
ATOM	1209	CB	LEU	A	155	2.801	1.636	1.075	1.00	19.65	C
ATOM	1210	CG	LEU	A	155	3.080	0.133	1.019	1.00	17.19	C
ATOM	1211	CD1	LEU	A	155	3.069	-0.273	-0.422	1.00	18.14	C
ATOM	1212	CD2	LEU	A	155	4.396	-0.259	1.647	1.00	17.17	C
ATOM	1213	N	PHE	A	156	2.120	4.101	3.079	1.00	26.64	N
ATOM	1214	CA	PHE	A	156	1.490	5.403	3.375	1.00	26.26	C
ATOM	1215	C	PHE	A	156	2.460	6.391	4.033	1.00	24.10	C
ATOM	1216	O	PHE	A	156	2.373	7.601	3.814	1.00	23.49	O
ATOM	1217	CB	PHE	A	156	0.240	5.268	4.260	1.00	23.92	C
ATOM	1218	CG	PHE	A	156	-0.286	6.590	4.749	1.00	21.57	C
ATOM	1219	CD1	PHE	A	156	-0.843	7.500	3.865	1.00	20.83	C
ATOM	1220	CD2	PHE	A	156	-0.113	6.977	6.066	1.00	20.34	C
ATOM	1221	CE1	PHE	A	156	-1.209	8.766	4.286	1.00	16.36	C
ATOM	1222	CE2	PHE	A	156	-0.481	8.251	6.492	1.00	17.60	C
ATOM	1223	CZ	PHE	A	156	-1.029	9.140	5.594	1.00	16.53	C
ATOM	1224	N	PHE	A	157	3.415	5.874	4.791	1.00	21.35	N
ATOM	1225	CA	PHE	A	157	4.441	6.724	5.339	1.00	21.42	C
ATOM	1226	C	PHE	A	157	5.657	6.859	4.427	1.00	22.33	C
ATOM	1227	O	PHE	A	157	6.712	7.303	4.879	1.00	23.73	O
ATOM	1228	CB	PHE	A	157	4.863	6.195	6.700	1.00	21.49	C
ATOM	1229	CG	PHE	A	157	4.238	6.920	7.846	1.00	17.83	C
ATOM	1230	CD1	PHE	A	157	3.628	8.139	7.652	1.00	17.24	C

ATOM	1231	CD2	PHE	A	157	4.376	6.444	9.120	1.00	19.41	C
ATOM	1232	CE1	PHE	A	157	3.197	8.872	8.688	1.00	14.49	C
ATOM	1233	CE2	PHE	A	157	3.948	7.170	10.159	1.00	18.81	C
ATOM	1234	CZ	PHE	A	157	3.362	8.398	9.940	1.00	20.97	C
ATOM	1235	N	ALA	A	158	5.524	6.405	3.175	1.00	23.41	N
ATOM	1236	CA	ALA	A	158	6.590	6.492	2.160	1.00	21.51	C
ATOM	1237	C	ALA	A	158	6.383	7.773	1.393	1.00	22.27	C
ATOM	1238	O	ALA	A	158	7.251	8.647	1.377	1.00	22.61	O
ATOM	1239	CB	ALA	A	158	6.526	5.321	1.199	1.00	16.28	C
ATOM	1240	N	LYS	A	159	5.185	7.930	0.840	1.00	22.44	N
ATOM	1241	CA	LYS	A	159	4.829	9.184	0.200	1.00	21.86	C
ATOM	1242	C	LYS	A	159	5.146	10.345	1.144	1.00	23.62	C
ATOM	1243	O	LYS	A	159	5.899	11.218	0.761	1.00	25.81	O
ATOM	1244	CB	LYS	A	159	3.358	9.187	-0.202	1.00	19.48	C
ATOM	1245	CG	LYS	A	159	3.096	8.664	-1.584	1.00	18.68	C
ATOM	1246	CD	LYS	A	159	4.087	7.579	-1.993	1.00	19.63	C
ATOM	1247	CE	LYS	A	159	3.781	7.040	-3.387	1.00	20.86	C
ATOM	1248	NZ	LYS	A	159	4.795	6.042	-3.824	1.00	23.26	N1+
ATOM	1249	N	ARG	A	160	4.850	10.195	2.436	1.00	23.94	N
ATOM	1250	CA	ARG	A	160	5.123	11.255	3.413	1.00	25.27	C
ATOM	1251	C	ARG	A	160	6.546	11.157	3.957	1.00	26.63	C
ATOM	1252	O	ARG	A	160	6.750	11.043	5.183	1.00	23.87	O
ATOM	1253	CB	ARG	A	160	4.135	11.184	4.583	1.00	28.93	C
ATOM	1254	CG	ARG	A	160	2.655	11.179	4.194	1.00	27.51	C
ATOM	1255	CD	ARG	A	160	2.030	12.549	4.347	1.00	25.69	C
ATOM	1256	NE	ARG	A	160	0.589	12.455	4.562	1.00	24.09	N
ATOM	1257	CZ	ARG	A	160	0.025	12.102	5.714	1.00	22.36	C
ATOM	1258	NH1	ARG	A	160	0.772	11.875	6.797	1.00	20.48	N1+
ATOM	1259	NH2	ARG	A	160	-1.292	11.998	5.786	1.00	19.93	N
ATOM	1260	N	TYR	A	161	7.468	10.909	3.020	1.00	26.96	N
ATOM	1261	CA	TYR	A	161	8.917	11.151	3.154	1.00	25.36	C
ATOM	1262	C	TYR	A	161	9.285	11.672	1.781	1.00	25.00	C
ATOM	1263	O	TYR	A	161	9.938	12.717	1.649	1.00	26.93	O
ATOM	1264	CB	TYR	A	161	9.666	9.839	3.404	1.00	22.15	C
ATOM	1265	CG	TYR	A	161	11.146	9.948	3.736	1.00	19.16	C
ATOM	1266	CD1	TYR	A	161	11.649	10.985	4.526	1.00	21.34	C
ATOM	1267	CD2	TYR	A	161	12.035	8.967	3.311	1.00	17.23	C
ATOM	1268	CE1	TYR	A	161	13.021	11.033	4.875	1.00	18.50	C
ATOM	1269	CE2	TYR	A	161	13.376	9.007	3.641	1.00	15.97	C
ATOM	1270	CZ	TYR	A	161	13.870	10.035	4.411	1.00	16.75	C
ATOM	1271	OH	TYR	A	161	15.220	10.080	4.642	1.00	14.91	O
ATOM	1272	N	LYS	A	162	8.684	11.030	0.776	1.00	24.44	N
ATOM	1273	CA	LYS	A	162	8.762	11.445	-0.629	1.00	20.54	C
ATOM	1274	C	LYS	A	162	8.217	12.847	-0.779	1.00	18.06	C
ATOM	1275	O	LYS	A	162	8.972	13.809	-0.711	1.00	18.82	O
ATOM	1276	CB	LYS	A	162	7.963	10.477	-1.508	1.00	19.05	C
ATOM	1277	CG	LYS	A	162	8.158	10.649	-3.005	1.00	18.72	C
ATOM	1278	CD	LYS	A	162	7.086	11.530	-3.600	1.00	15.41	C
ATOM	1279	CE	LYS	A	162	6.906	11.243	-5.053	1.00	13.03	C
ATOM	1280	NZ	LYS	A	162	6.676	9.809	-5.269	1.00	14.01	N1+
ATOM	1281	N	ALA	A	163	6.893	12.947	-0.846	1.00	17.36	N
ATOM	1282	CA	ALA	A	163	6.153	14.205	-0.954	1.00	17.24	C
ATOM	1283	C	ALA	A	163	6.795	15.380	-0.258	1.00	17.12	C
ATOM	1284	O	ALA	A	163	6.690	16.493	-0.748	1.00	19.51	O
ATOM	1285	CB	ALA	A	163	4.736	14.030	-0.439	1.00	14.73	C
ATOM	1286	N	ALA	A	164	7.419	15.144	0.894	1.00	16.39	N
ATOM	1287	CA	ALA	A	164	8.122	16.201	1.603	1.00	17.36	C
ATOM	1288	C	ALA	A	164	9.253	16.693	0.709	1.00	19.77	C
ATOM	1289	O	ALA	A	164	9.142	17.759	0.114	1.00	20.30	O
ATOM	1290	CB	ALA	A	164	8.670	15.686	2.930	1.00	15.34	C
ATOM	1291	N	PHE	A	165	10.238	15.827	0.466	1.00	21.94	N
ATOM	1292	CA	PHE	A	165	11.379	16.135	-0.393	1.00	20.00	C
ATOM	1293	C	PHE	A	165	10.864	16.794	-1.664	1.00	19.97	C
ATOM	1294	O	PHE	A	165	11.217	17.951	-1.933	1.00	19.72	O
ATOM	1295	CB	PHE	A	165	12.108	14.842	-0.765	1.00	24.10	C
ATOM	1296	CG	PHE	A	165	13.261	14.491	0.139	1.00	26.13	C
ATOM	1297	CD1	PHE	A	165	13.084	14.331	1.495	1.00	26.42	C
ATOM	1298	CD2	PHE	A	165	14.505	14.200	-0.396	1.00	27.17	C
ATOM	1299	CE1	PHE	A	165	14.128	13.891	2.287	1.00	24.89	C
ATOM	1300	CE2	PHE	A	165	15.536	13.758	0.397	1.00	22.89	C
ATOM	1301	CZ	PHE	A	165	15.350	13.609	1.730	1.00	22.00	C

ATOM	1302	N	THR	A	166	9.807	16.176	-2.209	1.00	18.51	N
ATOM	1303	CA	THR	A	166	9.151	16.502	-3.488	1.00	17.70	C
ATOM	1304	C	THR	A	166	8.432	17.857	-3.457	1.00	20.02	C
ATOM	1305	O	THR	A	166	7.358	18.038	-4.048	1.00	21.09	O
ATOM	1306	CB	THR	A	166	8.105	15.409	-3.838	1.00	18.48	C
ATOM	1307	CG2	THR	A	166	7.511	15.601	-5.242	1.00	15.89	C
ATOM	1308	OG1	THR	A	166	8.715	14.114	-3.735	1.00	18.39	O
ATOM	1309	N	GLU	A	167	8.978	18.778	-2.677	1.00	20.35	N
ATOM	1310	CA	GLU	A	167	8.511	20.145	-2.670	1.00	20.28	C
ATOM	1311	C	GLU	A	167	9.603	21.010	-2.066	1.00	18.79	C
ATOM	1312	O	GLU	A	167	10.110	21.924	-2.699	1.00	19.11	O
ATOM	1313	CB	GLU	A	167	7.243	20.228	-1.846	1.00	20.88	C
ATOM	1314	CG	GLU	A	167	6.759	21.612	-1.587	1.00	26.70	C
ATOM	1315	CD	GLU	A	167	5.856	21.656	-0.377	1.00	29.94	C
ATOM	1316	OE1	GLU	A	167	4.740	21.074	-0.432	1.00	32.74	O
ATOM	1317	OE2	GLU	A	167	6.300	22.200	0.658	1.00	32.31	O1-
ATOM	1318	N	CYS	A	168	10.066	20.636	-0.895	1.00	19.65	N
ATOM	1319	CA	CYS	A	168	10.978	21.490	-0.205	1.00	22.23	C
ATOM	1320	C	CYS	A	168	12.291	20.781	-0.033	1.00	25.31	C
ATOM	1321	O	CYS	A	168	12.626	20.370	1.077	1.00	29.59	O
ATOM	1322	CB	CYS	A	168	10.395	21.919	1.147	1.00	22.76	C
ATOM	1323	SG	CYS	A	168	11.603	22.432	2.429	1.00	26.02	S
ATOM	1324	N	CYS	A	169	13.009	20.566	-1.136	1.00	24.80	N
ATOM	1325	CA	CYS	A	169	14.459	20.798	-1.101	1.00	27.27	C
ATOM	1326	C	CYS	A	169	14.569	22.293	-1.412	1.00	26.49	C
ATOM	1327	O	CYS	A	169	15.379	23.015	-0.802	1.00	26.20	O
ATOM	1328	CB	CYS	A	169	15.190	19.988	-2.194	1.00	30.98	C
ATOM	1329	SG	CYS	A	169	15.841	18.333	-1.718	1.00	33.25	S
ATOM	1330	N	GLN	A	170	13.492	22.748	-2.059	1.00	26.22	N
ATOM	1331	CA	GLN	A	170	13.353	23.983	-2.844	1.00	25.86	C
ATOM	1332	C	GLN	A	170	13.998	25.203	-2.207	1.00	26.18	C
ATOM	1333	O	GLN	A	170	15.202	25.251	-2.033	1.00	30.02	O
ATOM	1334	CB	GLN	A	170	11.842	24.269	-3.085	1.00	25.67	C
ATOM	1335	CG	GLN	A	170	11.397	24.518	-4.531	1.00	21.68	C
ATOM	1336	CD	GLN	A	170	11.373	23.257	-5.393	1.00	20.70	C
ATOM	1337	NE2	GLN	A	170	12.540	22.814	-5.816	1.00	20.61	N
ATOM	1338	OE1	GLN	A	170	10.321	22.737	-5.727	1.00	16.98	O
ATOM	1339	N	ALA	A	171	13.192	26.161	-1.785	1.00	25.17	N
ATOM	1340	CA	ALA	A	171	13.718	27.493	-1.587	1.00	22.37	C
ATOM	1341	C	ALA	A	171	14.440	27.547	-0.279	1.00	23.13	C
ATOM	1342	O	ALA	A	171	15.176	28.489	-0.017	1.00	25.63	O
ATOM	1343	CB	ALA	A	171	12.619	28.501	-1.608	1.00	24.39	C
ATOM	1344	N	ALA	A	172	14.170	26.578	0.583	1.00	22.80	N
ATOM	1345	CA	ALA	A	172	14.686	26.649	1.935	1.00	23.27	C
ATOM	1346	C	ALA	A	172	15.967	25.845	2.129	1.00	23.80	C
ATOM	1347	O	ALA	A	172	16.315	25.519	3.270	1.00	21.53	O
ATOM	1348	CB	ALA	A	172	13.634	26.207	2.915	1.00	21.51	C
ATOM	1349	N	ASP	A	173	16.684	25.569	1.031	1.00	25.42	N
ATOM	1350	CA	ASP	A	173	17.901	24.751	1.088	1.00	28.45	C
ATOM	1351	C	ASP	A	173	17.612	23.425	1.779	1.00	30.18	C
ATOM	1352	O	ASP	A	173	18.403	22.987	2.608	1.00	31.67	O
ATOM	1353	CB	ASP	A	173	18.973	25.462	1.906	1.00	29.65	C
ATOM	1354	CG	ASP	A	173	19.953	26.208	1.057	1.00	30.99	C
ATOM	1355	OD1	ASP	A	173	19.492	27.029	0.227	1.00	32.55	O
ATOM	1356	OD2	ASP	A	173	21.176	25.999	1.265	1.00	32.46	O1-
ATOM	1357	N	LYS	A	174	16.377	22.957	1.652	1.00	30.45	N
ATOM	1358	CA	LYS	A	174	15.795	21.965	2.549	1.00	29.08	C
ATOM	1359	C	LYS	A	174	15.766	22.368	4.036	1.00	28.75	C
ATOM	1360	O	LYS	A	174	15.050	21.761	4.840	1.00	29.82	O
ATOM	1361	CB	LYS	A	174	16.501	20.618	2.369	1.00	29.28	C
ATOM	1362	CG	LYS	A	174	17.744	20.415	3.213	1.00	28.90	C
ATOM	1363	CD	LYS	A	174	17.508	19.425	4.326	1.00	28.34	C
ATOM	1364	CE	LYS	A	174	18.696	19.385	5.263	1.00	28.62	C
ATOM	1365	NZ	LYS	A	174	19.405	18.085	5.065	1.00	31.78	N1+
ATOM	1366	N	ALA	A	175	16.507	23.402	4.401	1.00	26.56	N
ATOM	1367	CA	ALA	A	175	16.781	23.678	5.795	1.00	27.02	C
ATOM	1368	C	ALA	A	175	15.532	23.529	6.661	1.00	27.16	C
ATOM	1369	O	ALA	A	175	15.266	22.457	7.181	1.00	27.67	O
ATOM	1370	CB	ALA	A	175	17.359	25.092	5.929	1.00	29.25	C
ATOM	1371	N	ALA	A	176	14.672	24.542	6.602	1.00	26.48	N
ATOM	1372	CA	ALA	A	176	13.614	24.748	7.567	1.00	20.96	C

ATOM	1373	C	ALA	A	176	12.325	24.254	6.976	1.00	21.35	C
ATOM	1374	O	ALA	A	176	11.676	23.432	7.557	1.00	22.19	O
ATOM	1375	CB	ALA	A	176	13.506	26.217	7.899	1.00	20.23	C
ATOM	1376	N	CYS	A	177	11.973	24.711	5.784	1.00	22.81	N
ATOM	1377	CA	CYS	A	177	10.706	24.305	5.168	1.00	25.45	C
ATOM	1378	C	CYS	A	177	10.548	22.808	4.974	1.00	25.72	C
ATOM	1379	O	CYS	A	177	9.532	22.387	4.413	1.00	25.67	O
ATOM	1380	CB	CYS	A	177	10.498	24.980	3.800	1.00	28.47	C
ATOM	1381	SG	CYS	A	177	11.590	24.464	2.414	1.00	27.41	S
ATOM	1382	N	LEU	A	178	11.645	22.068	5.169	1.00	25.62	N
ATOM	1383	CA	LEU	A	178	11.655	20.608	5.049	1.00	25.90	C
ATOM	1384	C	LEU	A	178	11.677	19.970	6.433	1.00	27.85	C
ATOM	1385	O	LEU	A	178	10.620	19.599	6.972	1.00	31.37	O
ATOM	1386	CB	LEU	A	178	12.880	20.117	4.255	1.00	23.18	C
ATOM	1387	CG	LEU	A	178	12.918	18.765	3.515	1.00	22.71	C
ATOM	1388	CD1	LEU	A	178	14.366	18.315	3.373	1.00	15.42	C
ATOM	1389	CD2	LEU	A	178	12.073	17.684	4.217	1.00	19.52	C
ATOM	1390	N	LEU	A	179	12.858	19.897	7.046	1.00	24.44	N
ATOM	1391	CA	LEU	A	179	13.079	18.960	8.143	1.00	23.00	C
ATOM	1392	C	LEU	A	179	12.215	19.038	9.449	1.00	23.84	C
ATOM	1393	O	LEU	A	179	12.326	18.165	10.315	1.00	22.67	O
ATOM	1394	CB	LEU	A	179	14.588	18.940	8.460	1.00	21.35	C
ATOM	1395	CG	LEU	A	179	15.248	19.579	9.697	1.00	23.42	C
ATOM	1396	CD1	LEU	A	179	16.763	19.387	9.589	1.00	22.06	C
ATOM	1397	CD2	LEU	A	179	14.898	21.062	9.845	1.00	18.81	C
ATOM	1398	N	PRO	A	180	11.301	20.026	9.578	1.00	24.90	N
ATOM	1399	CA	PRO	A	180	10.275	19.957	10.637	1.00	25.32	C
ATOM	1400	C	PRO	A	180	9.020	19.164	10.271	1.00	25.47	C
ATOM	1401	O	PRO	A	180	8.078	19.034	11.074	1.00	24.17	O
ATOM	1402	CB	PRO	A	180	9.956	21.425	10.914	1.00	25.04	C
ATOM	1403	CG	PRO	A	180	10.217	22.072	9.597	1.00	22.93	C
ATOM	1404	CD	PRO	A	180	11.523	21.427	9.210	1.00	24.99	C
ATOM	1405	N	LYS	A	181	9.018	18.641	9.054	1.00	24.23	N
ATOM	1406	CA	LYS	A	181	8.168	17.507	8.701	1.00	23.92	C
ATOM	1407	C	LYS	A	181	9.027	16.222	8.798	1.00	22.82	C
ATOM	1408	O	LYS	A	181	8.584	15.135	8.454	1.00	20.58	O
ATOM	1409	CB	LYS	A	181	7.615	17.711	7.286	1.00	25.23	C
ATOM	1410	CG	LYS	A	181	7.840	19.139	6.771	1.00	23.39	C
ATOM	1411	CD	LYS	A	181	7.528	19.289	5.312	1.00	21.94	C
ATOM	1412	CE	LYS	A	181	6.048	19.541	5.120	1.00	22.34	C
ATOM	1413	NZ	LYS	A	181	5.471	20.266	6.296	1.00	24.22	N1+
ATOM	1414	N	LEU	A	182	10.231	16.372	9.354	1.00	21.40	N
ATOM	1415	CA	LEU	A	182	11.159	15.277	9.612	1.00	18.92	C
ATOM	1416	C	LEU	A	182	11.513	15.303	11.107	1.00	18.56	C
ATOM	1417	O	LEU	A	182	12.482	14.685	11.539	1.00	16.25	O
ATOM	1418	CB	LEU	A	182	12.431	15.475	8.777	1.00	19.22	C
ATOM	1419	CG	LEU	A	182	12.869	14.556	7.621	1.00	20.67	C
ATOM	1420	CD1	LEU	A	182	12.740	13.115	8.064	1.00	22.41	C
ATOM	1421	CD2	LEU	A	182	12.070	14.796	6.342	1.00	16.92	C
ATOM	1422	N	ASP	A	183	10.857	16.186	11.849	1.00	19.20	N
ATOM	1423	CA	ASP	A	183	10.839	16.085	13.305	1.00	21.07	C
ATOM	1424	C	ASP	A	183	9.608	15.238	13.640	1.00	21.27	C
ATOM	1425	O	ASP	A	183	9.693	14.015	13.759	1.00	20.65	O
ATOM	1426	CB	ASP	A	183	10.731	17.485	13.960	1.00	22.49	C
ATOM	1427	CG	ASP	A	183	12.064	18.279	13.924	1.00	24.78	C
ATOM	1428	OD1	ASP	A	183	12.922	18.040	14.805	1.00	22.96	O
ATOM	1429	OD2	ASP	A	183	12.261	19.129	13.018	1.00	24.01	O1-
ATOM	1430	N	GLU	A	184	8.443	15.856	13.510	1.00	20.83	N
ATOM	1431	CA	GLU	A	184	7.190	15.210	13.853	1.00	20.58	C
ATOM	1432	C	GLU	A	184	7.081	13.767	13.329	1.00	19.58	C
ATOM	1433	O	GLU	A	184	7.119	12.822	14.118	1.00	18.60	O
ATOM	1434	CB	GLU	A	184	6.021	16.067	13.356	1.00	21.76	C
ATOM	1435	CG	GLU	A	184	4.698	15.723	13.997	1.00	25.58	C
ATOM	1436	CD	GLU	A	184	3.531	15.959	13.071	1.00	27.71	C
ATOM	1437	OE1	GLU	A	184	3.257	17.145	12.760	1.00	26.41	O
ATOM	1438	OE2	GLU	A	184	2.892	14.954	12.659	1.00	29.24	O1-
ATOM	1439	N	LEU	A	185	7.114	13.580	12.015	1.00	19.28	N
ATOM	1440	CA	LEU	A	185	6.872	12.254	11.438	1.00	21.28	C
ATOM	1441	C	LEU	A	185	8.027	11.229	11.664	1.00	21.48	C
ATOM	1442	O	LEU	A	185	8.321	10.422	10.797	1.00	20.44	O
ATOM	1443	CB	LEU	A	185	6.549	12.387	9.930	1.00	21.87	C

ATOM	1444	CG	LEU	A	185	5.217	13.009	9.440	1.00	24.75	C
ATOM	1445	CD1	LEU	A	185	5.400	14.429	8.858	1.00	21.49	C
ATOM	1446	CD2	LEU	A	185	4.605	12.100	8.376	1.00	22.23	C
ATOM	1447	N	ARG	A	186	8.728	11.323	12.789	1.00	21.60	N
ATOM	1448	CA	ARG	A	186	9.692	10.304	13.191	1.00	20.65	C
ATOM	1449	C	ARG	A	186	9.175	9.608	14.448	1.00	23.63	C
ATOM	1450	O	ARG	A	186	9.353	8.393	14.626	1.00	24.05	O
ATOM	1451	CB	ARG	A	186	11.036	10.941	13.514	1.00	21.81	C
ATOM	1452	CG	ARG	A	186	11.149	11.524	14.926	1.00	20.40	C
ATOM	1453	CD	ARG	A	186	12.527	11.273	15.525	1.00	22.73	C
ATOM	1454	NE	ARG	A	186	12.739	9.855	15.758	1.00	24.25	N
ATOM	1455	CZ	ARG	A	186	13.468	9.358	16.750	1.00	26.77	C
ATOM	1456	NH1	ARG	A	186	14.043	10.164	17.638	1.00	26.94	N1+
ATOM	1457	NH2	ARG	A	186	13.561	8.042	16.896	1.00	28.22	N
ATOM	1458	N	ASP	A	187	8.589	10.399	15.349	1.00	23.17	N
ATOM	1459	CA	ASP	A	187	7.844	9.858	16.463	1.00	20.77	C
ATOM	1460	C	ASP	A	187	6.644	9.094	15.937	1.00	18.87	C
ATOM	1461	O	ASP	A	187	6.412	7.993	16.382	1.00	18.84	O
ATOM	1462	CB	ASP	A	187	7.385	10.972	17.388	1.00	23.77	C
ATOM	1463	CG	ASP	A	187	8.523	11.556	18.208	1.00	26.43	C
ATOM	1464	OD1	ASP	A	187	8.918	10.937	19.241	1.00	27.86	O
ATOM	1465	OD2	ASP	A	187	8.981	12.669	17.847	1.00	26.15	O1-
ATOM	1466	N	GLU	A	188	6.000	9.594	14.880	1.00	18.08	N
ATOM	1467	CA	GLU	A	188	4.861	8.894	14.247	1.00	18.47	C
ATOM	1468	C	GLU	A	188	5.280	7.641	13.475	1.00	18.83	C
ATOM	1469	O	GLU	A	188	4.440	6.970	12.890	1.00	18.98	O
ATOM	1470	CB	GLU	A	188	4.074	9.840	13.299	1.00	16.29	C
ATOM	1471	CG	GLU	A	188	2.648	9.362	12.934	1.00	12.67	C
ATOM	1472	CD	GLU	A	188	1.770	10.425	12.231	1.00	16.08	C
ATOM	1473	OE1	GLU	A	188	2.195	11.591	12.086	1.00	16.21	O
ATOM	1474	OE2	GLU	A	188	0.607	10.109	11.882	1.00	14.17	O1-
ATOM	1475	N	GLY	A	189	6.587	7.418	13.355	1.00	20.49	N
ATOM	1476	CA	GLY	A	189	7.098	6.195	12.753	1.00	19.35	C
ATOM	1477	C	GLY	A	189	7.221	5.173	13.857	1.00	18.26	C
ATOM	1478	O	GLY	A	189	6.532	4.161	13.867	1.00	18.56	O
ATOM	1479	N	LYS	A	190	7.964	5.536	14.886	1.00	20.08	N
ATOM	1480	CA	LYS	A	190	7.903	4.816	16.152	1.00	22.77	C
ATOM	1481	C	LYS	A	190	6.463	4.574	16.647	1.00	22.46	C
ATOM	1482	O	LYS	A	190	6.120	3.434	16.940	1.00	24.59	O
ATOM	1483	CB	LYS	A	190	8.710	5.555	17.232	1.00	24.21	C
ATOM	1484	CG	LYS	A	190	10.186	5.699	16.889	1.00	27.27	C
ATOM	1485	CD	LYS	A	190	11.034	5.974	18.115	1.00	31.27	C
ATOM	1486	CE	LYS	A	190	10.959	7.431	18.550	1.00	32.12	C
ATOM	1487	NZ	LYS	A	190	12.010	7.723	19.570	1.00	31.95	N1+
ATOM	1488	N	ALA	A	191	5.594	5.589	16.605	1.00	20.34	N
ATOM	1489	CA	ALA	A	191	4.280	5.495	17.239	1.00	17.99	C
ATOM	1490	C	ALA	A	191	3.575	4.269	16.726	1.00	17.52	C
ATOM	1491	O	ALA	A	191	3.591	3.250	17.391	1.00	21.21	O
ATOM	1492	CB	ALA	A	191	3.442	6.712	16.971	1.00	17.43	C
ATOM	1493	N	SER	A	192	3.200	4.269	15.458	1.00	16.48	N
ATOM	1494	CA	SER	A	192	2.445	3.151	14.932	1.00	15.33	C
ATOM	1495	C	SER	A	192	3.246	1.855	14.918	1.00	17.13	C
ATOM	1496	O	SER	A	192	2.673	0.771	15.078	1.00	18.89	O
ATOM	1497	CB	SER	A	192	1.943	3.446	13.538	1.00	14.90	C
ATOM	1498	OG	SER	A	192	1.128	2.380	13.116	1.00	19.59	O
ATOM	1499	N	SER	A	193	4.567	1.946	14.777	1.00	13.75	N
ATOM	1500	CA	SER	A	193	5.377	0.738	14.665	1.00	11.93	C
ATOM	1501	C	SER	A	193	5.408	0.064	15.996	1.00	10.26	C
ATOM	1502	O	SER	A	193	6.136	-0.909	16.173	1.00	8.48	O
ATOM	1503	CB	SER	A	193	6.802	1.089	14.258	1.00	15.39	C
ATOM	1504	OG	SER	A	193	7.526	1.680	15.322	1.00	15.80	O
ATOM	1505	N	ALA	A	194	4.916	0.833	16.965	1.00	13.13	N
ATOM	1506	CA	ALA	A	194	4.875	0.494	18.384	1.00	14.96	C
ATOM	1507	C	ALA	A	194	3.436	0.431	18.859	1.00	12.28	C
ATOM	1508	O	ALA	A	194	3.117	-0.360	19.733	1.00	16.44	O
ATOM	1509	CB	ALA	A	194	5.647	1.543	19.205	1.00	14.37	C
ATOM	1510	N	LYS	A	195	2.560	1.162	18.186	1.00	8.87	N
ATOM	1511	CA	LYS	A	195	1.129	1.081	18.415	1.00	10.05	C
ATOM	1512	C	LYS	A	195	0.656	-0.181	17.755	1.00	9.99	C
ATOM	1513	O	LYS	A	195	-0.535	-0.421	17.682	1.00	12.22	O
ATOM	1514	CB	LYS	A	195	0.390	2.267	17.767	1.00	12.99	C

ATOM	1515	CG	LYS	A	195	0.478	3.588	18.531	1.00	15.37	C
ATOM	1516	CD	LYS	A	195	0.179	4.787	17.664	1.00	16.04	C
ATOM	1517	CE	LYS	A	195	-1.184	5.396	17.995	1.00	19.24	C
ATOM	1518	NZ	LYS	A	195	-1.397	6.691	17.246	1.00	20.94	N1+
ATOM	1519	N	GLN	A	196	1.586	-0.882	17.112	1.00	13.42	N
ATOM	1520	CA	GLN	A	196	1.302	-2.120	16.370	1.00	13.91	C
ATOM	1521	C	GLN	A	196	1.790	-3.377	17.084	1.00	13.37	C
ATOM	1522	O	GLN	A	196	0.998	-4.282	17.270	1.00	15.65	O
ATOM	1523	CB	GLN	A	196	1.923	-2.071	14.971	1.00	13.77	C
ATOM	1524	CG	GLN	A	196	1.763	-3.343	14.183	1.00	15.75	C
ATOM	1525	CD	GLN	A	196	0.630	-3.266	13.192	1.00	20.39	C
ATOM	1526	NE2	GLN	A	196	-0.021	-2.104	13.132	1.00	21.97	N
ATOM	1527	OE1	GLN	A	196	0.344	-4.228	12.470	1.00	19.31	O
ATOM	1528	N	ARG	A	197	3.063	-3.437	17.495	1.00	10.81	N
ATOM	1529	CA	ARG	A	197	3.666	-4.683	17.989	1.00	10.56	C
ATOM	1530	C	ARG	A	197	2.685	-5.310	18.950	1.00	12.83	C
ATOM	1531	O	ARG	A	197	2.476	-6.508	18.910	1.00	14.23	O
ATOM	1532	CB	ARG	A	197	5.014	-4.404	18.679	1.00	11.17	C
ATOM	1533	CG	ARG	A	197	5.808	-5.620	19.258	1.00	11.07	C
ATOM	1534	CD	ARG	A	197	5.853	-6.866	18.353	1.00	8.47	C
ATOM	1535	NE	ARG	A	197	6.520	-8.013	18.986	1.00	6.63	N
ATOM	1536	CZ	ARG	A	197	5.931	-9.185	19.260	1.00	8.70	C
ATOM	1537	NH1	ARG	A	197	4.618	-9.319	19.201	1.00	7.16	N1+
ATOM	1538	NH2	ARG	A	197	6.645	-10.211	19.706	1.00	7.19	N
ATOM	1539	N	LEU	A	198	1.906	-4.441	19.595	1.00	14.31	N
ATOM	1540	CA	LEU	A	198	0.664	-4.783	20.286	1.00	15.62	C
ATOM	1541	C	LEU	A	198	-0.305	-5.651	19.460	1.00	18.97	C
ATOM	1542	O	LEU	A	198	-0.561	-6.800	19.835	1.00	22.05	O
ATOM	1543	CB	LEU	A	198	-0.047	-3.501	20.714	1.00	12.42	C
ATOM	1544	CG	LEU	A	198	-0.455	-3.324	22.174	1.00	13.86	C
ATOM	1545	CD1	LEU	A	198	-1.936	-2.970	22.232	1.00	13.35	C
ATOM	1546	CD2	LEU	A	198	-0.162	-4.573	22.987	1.00	10.76	C
ATOM	1547	N	LYS	A	199	-0.925	-5.076	18.423	1.00	18.33	N
ATOM	1548	CA	LYS	A	199	-1.898	-5.785	17.578	1.00	18.04	C
ATOM	1549	C	LYS	A	199	-1.443	-7.160	17.098	1.00	19.50	C
ATOM	1550	O	LYS	A	199	-2.262	-7.986	16.724	1.00	20.23	O
ATOM	1551	CB	LYS	A	199	-2.249	-4.949	16.355	1.00	18.92	C
ATOM	1552	CG	LYS	A	199	-3.608	-4.261	16.389	1.00	18.14	C
ATOM	1553	CD	LYS	A	199	-3.598	-2.944	15.594	1.00	13.47	C
ATOM	1554	CE	LYS	A	199	-2.700	-1.907	16.227	1.00	8.90	C
ATOM	1555	NZ	LYS	A	199	-2.448	-2.218	17.659	1.00	9.83	N1+
ATOM	1556	N	CYS	A	200	-0.140	-7.375	17.001	1.00	21.92	N
ATOM	1557	CA	CYS	A	200	0.372	-8.717	16.755	1.00	23.15	C
ATOM	1558	C	CYS	A	200	0.459	-9.453	18.071	1.00	25.39	C
ATOM	1559	O	CYS	A	200	0.080	-10.614	18.142	1.00	29.62	O
ATOM	1560	CB	CYS	A	200	1.762	-8.682	16.118	1.00	22.40	C
ATOM	1561	SG	CYS	A	200	1.793	-7.924	14.469	1.00	21.69	S
ATOM	1562	N	ALA	A	201	0.949	-8.778	19.114	1.00	26.47	N
ATOM	1563	CA	ALA	A	201	1.139	-9.381	20.440	1.00	23.93	C
ATOM	1564	C	ALA	A	201	-0.165	-9.943	20.993	1.00	21.85	C
ATOM	1565	O	ALA	A	201	-0.208	-11.107	21.360	1.00	20.07	O
ATOM	1566	CB	ALA	A	201	1.740	-8.371	21.408	1.00	24.67	C
ATOM	1567	N	SER	A	202	-1.245	-9.173	20.919	1.00	20.21	N
ATOM	1568	CA	SER	A	202	-2.584	-9.760	20.944	1.00	22.62	C
ATOM	1569	C	SER	A	202	-2.608	-11.018	20.056	1.00	23.67	C
ATOM	1570	O	SER	A	202	-2.798	-12.128	20.544	1.00	24.94	O
ATOM	1571	CB	SER	A	202	-3.644	-8.779	20.400	1.00	23.40	C
ATOM	1572	OG	SER	A	202	-3.857	-7.642	21.221	1.00	23.09	O
ATOM	1573	N	LEU	A	203	-2.326	-10.847	18.765	1.00	24.01	N
ATOM	1574	CA	LEU	A	203	-2.674	-11.850	17.762	1.00	22.30	C
ATOM	1575	C	LEU	A	203	-2.159	-13.281	17.940	1.00	20.69	C
ATOM	1576	O	LEU	A	203	-2.961	-14.201	17.903	1.00	20.01	O
ATOM	1577	CB	LEU	A	203	-2.320	-11.341	16.368	1.00	21.07	C
ATOM	1578	CG	LEU	A	203	-3.523	-11.255	15.429	1.00	20.68	C
ATOM	1579	CD1	LEU	A	203	-4.289	-12.558	15.445	1.00	22.29	C
ATOM	1580	CD2	LEU	A	203	-4.410	-10.140	15.868	1.00	20.27	C
ATOM	1581	N	GLN	A	204	-0.843	-13.487	17.919	1.00	20.66	N
ATOM	1582	CA	GLN	A	204	-0.277	-14.834	18.099	1.00	23.10	C
ATOM	1583	C	GLN	A	204	1.062	-14.932	18.874	1.00	24.84	C
ATOM	1584	O	GLN	A	204	1.816	-15.917	18.736	1.00	25.14	O
ATOM	1585	CB	GLN	A	204	-0.135	-15.567	16.762	1.00	22.96	C

ATOM	1586	CG	GLN	A	204	-0.633	-14.814	15.556	1.00	24.32	C
ATOM	1587	CD	GLN	A	204	0.297	-14.952	14.367	1.00	23.07	C
ATOM	1588	NE2	GLN	A	204	0.408	-13.888	13.570	1.00	22.46	N
ATOM	1589	OE1	GLN	A	204	0.920	-15.990	14.175	1.00	21.96	O
ATOM	1590	N	LYS	A	205	1.345	-13.922	19.695	1.00	21.97	N
ATOM	1591	CA	LYS	A	205	2.050	-14.152	20.952	1.00	18.40	C
ATOM	1592	C	LYS	A	205	0.998	-14.276	22.063	1.00	14.76	C
ATOM	1593	O	LYS	A	205	1.311	-14.599	23.192	1.00	13.45	O
ATOM	1594	CB	LYS	A	205	3.020	-13.007	21.232	1.00	19.14	C
ATOM	1595	CG	LYS	A	205	2.841	-12.327	22.558	1.00	18.87	C
ATOM	1596	CD	LYS	A	205	3.969	-12.710	23.485	1.00	21.97	C
ATOM	1597	CE	LYS	A	205	5.126	-11.720	23.351	1.00	23.57	C
ATOM	1598	NZ	LYS	A	205	6.410	-12.330	23.789	1.00	23.75	N1+
ATOM	1599	N	PHE	A	206	-0.253	-14.040	21.707	1.00	12.24	N
ATOM	1600	CA	PHE	A	206	-1.395	-14.291	22.578	1.00	13.28	C
ATOM	1601	C	PHE	A	206	-2.440	-14.872	21.656	1.00	13.87	C
ATOM	1602	O	PHE	A	206	-2.389	-14.638	20.459	1.00	15.15	O
ATOM	1603	CB	PHE	A	206	-1.945	-12.972	23.110	1.00	14.11	C
ATOM	1604	CG	PHE	A	206	-1.995	-12.870	24.594	1.00	8.89	C
ATOM	1605	CD1	PHE	A	206	-0.961	-12.280	25.264	1.00	7.13	C
ATOM	1606	CD2	PHE	A	206	-3.173	-13.071	25.251	1.00	6.33	C
ATOM	1607	CE1	PHE	A	206	-1.102	-11.880	26.508	1.00	7.41	C
ATOM	1608	CE2	PHE	A	206	-3.317	-12.670	26.507	1.00	8.37	C
ATOM	1609	CZ	PHE	A	206	-2.278	-12.066	27.139	1.00	9.60	C
ATOM	1610	N	GLY	A	207	-3.502	-15.416	22.230	1.00	14.43	N
ATOM	1611	CA	GLY	A	207	-4.553	-16.003	21.425	1.00	14.40	C
ATOM	1612	C	GLY	A	207	-5.095	-15.066	20.366	1.00	15.46	C
ATOM	1613	O	GLY	A	207	-5.411	-13.904	20.628	1.00	16.20	O
ATOM	1614	N	GLU	A	208	-5.330	-15.625	19.192	1.00	15.63	N
ATOM	1615	CA	GLU	A	208	-5.998	-14.904	18.125	1.00	18.59	C
ATOM	1616	C	GLU	A	208	-7.446	-14.492	18.494	1.00	19.71	C
ATOM	1617	O	GLU	A	208	-7.997	-13.540	17.917	1.00	21.56	O
ATOM	1618	CB	GLU	A	208	-5.971	-15.761	16.845	1.00	18.16	C
ATOM	1619	CG	GLU	A	208	-7.133	-16.747	16.691	1.00	18.76	C
ATOM	1620	CD	GLU	A	208	-8.245	-16.193	15.814	1.00	19.03	C
ATOM	1621	OE1	GLU	A	208	-8.448	-14.963	15.793	1.00	18.38	O
ATOM	1622	OE2	GLU	A	208	-8.860	-16.979	15.069	1.00	22.62	O1-
ATOM	1623	N	ARG	A	209	-8.083	-15.253	19.389	1.00	18.66	N
ATOM	1624	CA	ARG	A	209	-9.477	-15.021	19.769	1.00	17.70	C
ATOM	1625	C	ARG	A	209	-9.626	-13.656	20.423	1.00	18.80	C
ATOM	1626	O	ARG	A	209	-10.580	-12.930	20.170	1.00	17.41	O
ATOM	1627	CB	ARG	A	209	-9.939	-16.095	20.751	1.00	17.78	C
ATOM	1628	CG	ARG	A	209	-11.325	-16.650	20.479	1.00	22.53	C
ATOM	1629	CD	ARG	A	209	-12.149	-15.748	19.536	1.00	23.84	C
ATOM	1630	NE	ARG	A	209	-12.523	-14.506	20.204	1.00	25.57	N
ATOM	1631	CZ	ARG	A	209	-13.644	-13.825	19.989	1.00	25.17	C
ATOM	1632	NH1	ARG	A	209	-14.470	-14.180	19.011	1.00	27.58	N1+
ATOM	1633	NH2	ARG	A	209	-13.900	-12.739	20.714	1.00	24.46	N
ATOM	1634	N	ALA	A	210	-8.623	-13.292	21.210	1.00	22.42	N
ATOM	1635	CA	ALA	A	210	-8.644	-12.078	21.995	1.00	25.29	C
ATOM	1636	C	ALA	A	210	-8.974	-10.918	21.071	1.00	27.14	C
ATOM	1637	O	ALA	A	210	-10.042	-10.313	21.208	1.00	29.89	O
ATOM	1638	CB	ALA	A	210	-7.289	-11.867	22.666	1.00	24.38	C
ATOM	1639	N	PHE	A	211	-8.173	-10.760	20.012	1.00	26.77	N
ATOM	1640	CA	PHE	A	211	-8.289	-9.629	19.081	1.00	23.38	C
ATOM	1641	C	PHE	A	211	-9.721	-9.257	18.741	1.00	21.80	C
ATOM	1642	O	PHE	A	211	-10.079	-8.090	18.838	1.00	18.92	O
ATOM	1643	CB	PHE	A	211	-7.543	-9.926	17.788	1.00	25.16	C
ATOM	1644	CG	PHE	A	211	-7.077	-8.695	17.057	1.00	26.16	C
ATOM	1645	CD1	PHE	A	211	-6.020	-7.951	17.542	1.00	25.15	C
ATOM	1646	CD2	PHE	A	211	-7.562	-8.404	15.786	1.00	25.67	C
ATOM	1647	CE1	PHE	A	211	-5.440	-6.965	16.771	1.00	23.64	C
ATOM	1648	CE2	PHE	A	211	-6.994	-7.414	15.017	1.00	23.27	C
ATOM	1649	CZ	PHE	A	211	-5.925	-6.698	15.511	1.00	25.63	C
ATOM	1650	N	LYS	A	212	-10.536	-10.244	18.363	1.00	20.64	N
ATOM	1651	CA	LYS	A	212	-11.955	-10.003	18.096	1.00	20.36	C
ATOM	1652	C	LYS	A	212	-12.497	-9.141	19.218	1.00	22.63	C
ATOM	1653	O	LYS	A	212	-12.772	-7.964	19.004	1.00	24.04	O
ATOM	1654	CB	LYS	A	212	-12.748	-11.308	18.044	1.00	19.99	C
ATOM	1655	CG	LYS	A	212	-13.261	-11.723	16.651	1.00	22.19	C
ATOM	1656	CD	LYS	A	212	-12.319	-12.755	15.969	1.00	17.63	C

ATOM	1657	CE	LYS	A	212	-13.061	-13.725	15.077	1.00	14.45	C
ATOM	1658	NZ	LYS	A	212	-14.268	-13.106	14.457	1.00	14.02	N1+
ATOM	1659	N	ALA	A	213	-12.384	-9.642	20.446	1.00	22.31	N
ATOM	1660	CA	ALA	A	213	-12.827	-8.900	21.614	1.00	21.34	C
ATOM	1661	C	ALA	A	213	-12.149	-7.537	21.705	1.00	21.10	C
ATOM	1662	O	ALA	A	213	-12.763	-6.552	22.098	1.00	23.45	O
ATOM	1663	CB	ALA	A	213	-12.569	-9.696	22.871	1.00	20.73	C
ATOM	1664	N	TRP	A	214	-10.922	-7.437	21.240	1.00	19.46	N
ATOM	1665	CA	TRP	A	214	-10.271	-6.142	21.224	1.00	19.15	C
ATOM	1666	C	TRP	A	214	-11.048	-5.224	20.314	1.00	18.85	C
ATOM	1667	O	TRP	A	214	-11.516	-4.175	20.734	1.00	20.49	O
ATOM	1668	CB	TRP	A	214	-8.870	-6.296	20.686	1.00	22.36	C
ATOM	1669	CG	TRP	A	214	-7.861	-5.482	21.350	1.00	24.56	C
ATOM	1670	CD1	TRP	A	214	-6.926	-5.942	22.246	1.00	26.33	C
ATOM	1671	CD2	TRP	A	214	-7.377	-4.211	20.888	1.00	25.12	C
ATOM	1672	CE2	TRP	A	214	-6.120	-4.005	21.484	1.00	28.85	C
ATOM	1673	CE3	TRP	A	214	-7.863	-3.267	19.975	1.00	21.79	C
ATOM	1674	NE1	TRP	A	214	-5.867	-5.073	22.305	1.00	31.06	N
ATOM	1675	CZ2	TRP	A	214	-5.341	-2.887	21.189	1.00	28.30	C
ATOM	1676	CZ3	TRP	A	214	-7.100	-2.178	19.689	1.00	18.16	C
ATOM	1677	CH2	TRP	A	214	-5.852	-1.991	20.287	1.00	25.36	C
ATOM	1678	N	ALA	A	215	-11.279	-5.677	19.092	1.00	18.46	N
ATOM	1679	CA	ALA	A	215	-11.815	-4.819	18.056	1.00	18.34	C
ATOM	1680	C	ALA	A	215	-13.346	-4.685	18.072	1.00	19.69	C
ATOM	1681	O	ALA	A	215	-13.853	-3.636	17.695	1.00	19.89	O
ATOM	1682	CB	ALA	A	215	-11.337	-5.295	16.705	1.00	17.27	C
ATOM	1683	N	VAL	A	216	-14.074	-5.711	18.532	1.00	19.07	N
ATOM	1684	CA	VAL	A	216	-15.533	-5.613	18.768	1.00	18.57	C
ATOM	1685	C	VAL	A	216	-15.801	-4.635	19.911	1.00	16.42	C
ATOM	1686	O	VAL	A	216	-16.854	-4.013	19.985	1.00	16.02	O
ATOM	1687	CB	VAL	A	216	-16.199	-6.979	19.159	1.00	18.60	C
ATOM	1688	CG1	VAL	A	216	-17.658	-6.980	18.765	1.00	18.91	C
ATOM	1689	CG2	VAL	A	216	-15.530	-8.129	18.488	1.00	18.58	C
ATOM	1690	N	ALA	A	217	-14.860	-4.555	20.837	1.00	15.89	N
ATOM	1691	CA	ALA	A	217	-14.811	-3.444	21.767	1.00	17.11	C
ATOM	1692	C	ALA	A	217	-14.553	-2.125	21.050	1.00	17.79	C
ATOM	1693	O	ALA	A	217	-15.155	-1.114	21.413	1.00	20.39	O
ATOM	1694	CB	ALA	A	217	-13.734	-3.679	22.827	1.00	17.06	C
ATOM	1695	N	ARG	A	218	-13.664	-2.114	20.050	1.00	16.98	N
ATOM	1696	CA	ARG	A	218	-13.190	-0.845	19.494	1.00	14.92	C
ATOM	1697	C	ARG	A	218	-13.902	-0.275	18.310	1.00	13.69	C
ATOM	1698	O	ARG	A	218	-14.093	0.920	18.241	1.00	17.63	O
ATOM	1699	CB	ARG	A	218	-11.717	-0.886	19.162	1.00	16.75	C
ATOM	1700	CG	ARG	A	218	-11.031	0.429	19.482	1.00	20.34	C
ATOM	1701	CD	ARG	A	218	-9.529	0.272	19.350	1.00	28.41	C
ATOM	1702	NE	ARG	A	218	-8.742	0.955	20.381	1.00	31.43	N
ATOM	1703	CZ	ARG	A	218	-7.410	0.999	20.357	1.00	31.18	C
ATOM	1704	NH1	ARG	A	218	-6.781	0.627	19.249	1.00	33.54	N1+
ATOM	1705	NH2	ARG	A	218	-6.709	1.463	21.392	1.00	28.29	N
ATOM	1706	N	LEU	A	219	-14.188	-1.074	17.304	1.00	13.67	N
ATOM	1707	CA	LEU	A	219	-14.863	-0.525	16.134	1.00	13.57	C
ATOM	1708	C	LEU	A	219	-16.279	-0.119	16.523	1.00	13.16	C
ATOM	1709	O	LEU	A	219	-16.875	0.721	15.861	1.00	11.91	O
ATOM	1710	CB	LEU	A	219	-14.861	-1.538	14.977	1.00	12.34	C
ATOM	1711	CG	LEU	A	219	-13.507	-2.219	14.718	1.00	11.08	C
ATOM	1712	CD1	LEU	A	219	-13.701	-3.486	13.935	1.00	12.13	C
ATOM	1713	CD2	LEU	A	219	-12.585	-1.277	13.980	1.00	10.31	C
ATOM	1714	N	SER	A	220	-16.711	-0.572	17.704	1.00	13.60	N
ATOM	1715	CA	SER	A	220	-18.039	-0.287	18.266	1.00	13.96	C
ATOM	1716	C	SER	A	220	-18.006	0.971	19.116	1.00	13.33	C
ATOM	1717	O	SER	A	220	-19.027	1.613	19.324	1.00	12.54	O
ATOM	1718	CB	SER	A	220	-18.527	-1.462	19.127	1.00	15.85	C
ATOM	1719	OG	SER	A	220	-19.168	-2.479	18.357	1.00	16.62	O
ATOM	1720	N	GLN	A	221	-16.798	1.360	19.507	1.00	15.03	N
ATOM	1721	CA	GLN	A	221	-16.498	2.618	20.203	1.00	14.21	C
ATOM	1722	C	GLN	A	221	-16.470	3.821	19.238	1.00	15.97	C
ATOM	1723	O	GLN	A	221	-16.314	4.959	19.669	1.00	17.34	O
ATOM	1724	CB	GLN	A	221	-15.127	2.473	20.843	1.00	13.10	C
ATOM	1725	CG	GLN	A	221	-14.878	3.266	22.062	1.00	20.06	C
ATOM	1726	CD	GLN	A	221	-14.119	2.455	23.085	1.00	24.79	C
ATOM	1727	NE2	GLN	A	221	-14.716	2.285	24.265	1.00	27.31	N

ATOM	1728	OE1	GLN	A	221	-13.066	1.884	22.784	1.00	24.46	O
ATOM	1729	N	ARG	A	222	-16.391	3.530	17.937	1.00	16.06	N
ATOM	1730	CA	ARG	A	222	-16.293	4.545	16.884	1.00	14.67	C
ATOM	1731	C	ARG	A	222	-17.453	4.450	15.874	1.00	14.79	C
ATOM	1732	O	ARG	A	222	-17.942	5.455	15.360	1.00	16.58	O
ATOM	1733	CB	ARG	A	222	-14.951	4.423	16.141	1.00	13.32	C
ATOM	1734	CG	ARG	A	222	-13.933	3.526	16.803	1.00	10.78	C
ATOM	1735	CD	ARG	A	222	-12.562	4.147	16.820	1.00	14.99	C
ATOM	1736	NE	ARG	A	222	-11.738	3.584	17.887	1.00	16.71	N
ATOM	1737	CZ	ARG	A	222	-10.937	4.294	18.683	1.00	17.32	C
ATOM	1738	NH1	ARG	A	222	-10.806	5.607	18.507	1.00	16.06	N1+
ATOM	1739	NH2	ARG	A	222	-10.252	3.687	19.654	1.00	12.90	N
ATOM	1740	N	PHE	A	223	-17.957	3.250	15.647	1.00	14.56	N
ATOM	1741	CA	PHE	A	223	-19.111	3.084	14.792	1.00	12.35	C
ATOM	1742	C	PHE	A	223	-20.298	2.602	15.626	1.00	13.17	C
ATOM	1743	O	PHE	A	223	-20.916	1.601	15.272	1.00	12.50	O
ATOM	1744	CB	PHE	A	223	-18.820	2.042	13.706	1.00	15.57	C
ATOM	1745	CG	PHE	A	223	-17.648	2.373	12.788	1.00	18.20	C
ATOM	1746	CD1	PHE	A	223	-16.762	3.398	13.060	1.00	18.12	C
ATOM	1747	CD2	PHE	A	223	-17.389	1.571	11.689	1.00	19.72	C
ATOM	1748	CE1	PHE	A	223	-15.642	3.594	12.261	1.00	20.71	C
ATOM	1749	CE2	PHE	A	223	-16.274	1.765	10.896	1.00	18.61	C
ATOM	1750	CZ	PHE	A	223	-15.401	2.767	11.182	1.00	18.31	C
ATOM	1751	N	PRO	A	224	-20.667	3.323	16.717	1.00	14.94	N
ATOM	1752	CA	PRO	A	224	-21.635	2.860	17.714	1.00	14.17	C
ATOM	1753	C	PRO	A	224	-23.096	2.979	17.275	1.00	15.44	C
ATOM	1754	O	PRO	A	224	-23.942	3.488	18.004	1.00	16.00	O
ATOM	1755	CB	PRO	A	224	-21.344	3.757	18.900	1.00	13.07	C
ATOM	1756	CG	PRO	A	224	-21.074	5.010	18.284	1.00	14.26	C
ATOM	1757	CD	PRO	A	224	-20.226	4.679	17.073	1.00	17.21	C
ATOM	1758	N	LYS	A	225	-23.347	2.630	16.026	1.00	15.99	N
ATOM	1759	CA	LYS	A	225	-24.668	2.300	15.555	1.00	15.34	C
ATOM	1760	C	LYS	A	225	-24.515	1.109	14.603	1.00	20.08	C
ATOM	1761	O	LYS	A	225	-25.481	0.396	14.332	1.00	23.63	O
ATOM	1762	CB	LYS	A	225	-25.285	3.490	14.839	1.00	10.48	C
ATOM	1763	CG	LYS	A	225	-24.358	4.174	13.887	1.00	10.33	C
ATOM	1764	CD	LYS	A	225	-24.354	5.652	14.130	1.00	9.50	C
ATOM	1765	CE	LYS	A	225	-25.685	6.266	13.772	1.00	11.24	C
ATOM	1766	NZ	LYS	A	225	-25.779	7.709	14.196	1.00	13.92	N1+
ATOM	1767	N	ALA	A	226	-23.282	0.839	14.171	1.00	21.60	N
ATOM	1768	CA	ALA	A	226	-22.963	-0.387	13.446	1.00	22.74	C
ATOM	1769	C	ALA	A	226	-23.686	-1.533	14.133	1.00	23.96	C
ATOM	1770	O	ALA	A	226	-23.520	-1.710	15.331	1.00	28.06	O
ATOM	1771	CB	ALA	A	226	-21.474	-0.630	13.497	1.00	21.05	C
ATOM	1772	N	GLU	A	227	-24.595	-2.212	13.446	1.00	23.06	N
ATOM	1773	CA	GLU	A	227	-25.267	-3.340	14.079	1.00	20.89	C
ATOM	1774	C	GLU	A	227	-24.243	-4.476	14.307	1.00	18.38	C
ATOM	1775	O	GLU	A	227	-23.142	-4.455	13.748	1.00	11.59	O
ATOM	1776	CB	GLU	A	227	-26.507	-3.810	13.258	1.00	22.63	C
ATOM	1777	CG	GLU	A	227	-27.720	-2.794	13.205	1.00	26.40	C
ATOM	1778	CD	GLU	A	227	-28.944	-3.104	14.146	1.00	29.49	C
ATOM	1779	OE1	GLU	A	227	-28.945	-4.106	14.913	1.00	29.48	O
ATOM	1780	OE2	GLU	A	227	-29.925	-2.315	14.120	1.00	26.69	O1-
ATOM	1781	N	PHE	A	228	-24.524	-5.295	15.321	1.00	19.59	N
ATOM	1782	CA	PHE	A	228	-23.714	-6.468	15.669	1.00	21.16	C
ATOM	1783	C	PHE	A	228	-23.418	-7.380	14.467	1.00	22.82	C
ATOM	1784	O	PHE	A	228	-22.343	-8.002	14.393	1.00	22.75	O
ATOM	1785	CB	PHE	A	228	-24.392	-7.285	16.798	1.00	19.31	C
ATOM	1786	CG	PHE	A	228	-23.470	-8.270	17.481	1.00	15.55	C
ATOM	1787	CD1	PHE	A	228	-22.401	-7.826	18.231	1.00	11.82	C
ATOM	1788	CD2	PHE	A	228	-23.598	-9.636	17.254	1.00	13.74	C
ATOM	1789	CE1	PHE	A	228	-21.482	-8.709	18.727	1.00	11.35	C
ATOM	1790	CE2	PHE	A	228	-22.675	-10.526	17.751	1.00	10.57	C
ATOM	1791	CZ	PHE	A	228	-21.620	-10.067	18.485	1.00	10.53	C
ATOM	1792	N	ALA	A	229	-24.362	-7.472	13.532	1.00	22.31	N
ATOM	1793	CA	ALA	A	229	-24.033	-7.999	12.215	1.00	21.94	C
ATOM	1794	C	ALA	A	229	-22.699	-7.383	11.737	1.00	22.28	C
ATOM	1795	O	ALA	A	229	-21.645	-7.988	11.955	1.00	22.58	O
ATOM	1796	CB	ALA	A	229	-25.157	-7.698	11.238	1.00	18.80	C
ATOM	1797	N	GLU	A	230	-22.718	-6.071	11.494	1.00	23.17	N
ATOM	1798	CA	GLU	A	230	-21.634	-5.373	10.779	1.00	22.57	C

ATOM	1799	C	GLU	A	230	-20.289	-5.093	11.487	1.00	21.60	C
ATOM	1800	O	GLU	A	230	-19.291	-4.855	10.813	1.00	20.95	O
ATOM	1801	CB	GLU	A	230	-22.147	-4.061	10.165	1.00	19.48	C
ATOM	1802	CG	GLU	A	230	-21.896	-3.975	8.671	1.00	17.15	C
ATOM	1803	CD	GLU	A	230	-22.865	-4.813	7.850	1.00	17.55	C
ATOM	1804	OE1	GLU	A	230	-23.995	-4.329	7.598	1.00	17.87	O
ATOM	1805	OE2	GLU	A	230	-22.488	-5.926	7.409	1.00	15.08	O1-
ATOM	1806	N	VAL	A	231	-20.231	-5.073	12.814	1.00	20.69	N
ATOM	1807	CA	VAL	A	231	-18.917	-5.007	13.435	1.00	16.38	C
ATOM	1808	C	VAL	A	231	-18.287	-6.364	13.136	1.00	20.32	C
ATOM	1809	O	VAL	A	231	-17.101	-6.442	12.828	1.00	21.55	O
ATOM	1810	CB	VAL	A	231	-18.978	-4.758	14.964	1.00	12.08	C
ATOM	1811	CG1	VAL	A	231	-17.812	-5.401	15.645	1.00	11.97	C
ATOM	1812	CG2	VAL	A	231	-18.937	-3.285	15.262	1.00	11.69	C
ATOM	1813	N	SER	A	232	-19.108	-7.408	13.049	1.00	22.30	N
ATOM	1814	CA	SER	A	232	-18.566	-8.749	12.844	1.00	25.21	C
ATOM	1815	C	SER	A	232	-18.383	-9.125	11.373	1.00	26.83	C
ATOM	1816	O	SER	A	232	-18.337	-10.306	11.009	1.00	28.08	O
ATOM	1817	CB	SER	A	232	-19.408	-9.788	13.586	1.00	25.39	C
ATOM	1818	OG	SER	A	232	-18.793	-10.070	14.841	1.00	28.11	O
ATOM	1819	N	LYS	A	233	-18.260	-8.096	10.536	1.00	26.97	N
ATOM	1820	CA	LYS	A	233	-17.661	-8.228	9.225	1.00	23.19	C
ATOM	1821	C	LYS	A	233	-16.769	-7.018	9.066	1.00	20.48	C
ATOM	1822	O	LYS	A	233	-16.735	-6.421	8.012	1.00	21.98	O
ATOM	1823	CB	LYS	A	233	-18.733	-8.254	8.133	1.00	25.56	C
ATOM	1824	CG	LYS	A	233	-18.198	-8.687	6.754	1.00	29.24	C
ATOM	1825	CD	LYS	A	233	-19.299	-9.170	5.786	1.00	28.84	C
ATOM	1826	CE	LYS	A	233	-18.745	-10.207	4.785	1.00	29.50	C
ATOM	1827	NZ	LYS	A	233	-19.637	-10.474	3.618	1.00	28.23	N1+
ATOM	1828	N	LEU	A	234	-16.191	-6.564	10.174	1.00	19.32	N
ATOM	1829	CA	LEU	A	234	-15.119	-5.570	10.155	1.00	19.26	C
ATOM	1830	C	LEU	A	234	-13.971	-6.022	11.075	1.00	20.45	C
ATOM	1831	O	LEU	A	234	-12.798	-5.927	10.710	1.00	20.91	O
ATOM	1832	CB	LEU	A	234	-15.623	-4.191	10.598	1.00	18.55	C
ATOM	1833	CG	LEU	A	234	-16.945	-3.619	10.054	1.00	20.65	C
ATOM	1834	CD1	LEU	A	234	-17.229	-2.274	10.718	1.00	20.73	C
ATOM	1835	CD2	LEU	A	234	-16.900	-3.452	8.536	1.00	18.64	C
ATOM	1836	N	VAL	A	235	-14.308	-6.626	12.214	1.00	19.59	N
ATOM	1837	CA	VAL	A	235	-13.301	-7.227	13.089	1.00	16.45	C
ATOM	1838	C	VAL	A	235	-12.927	-8.677	12.704	1.00	16.23	C
ATOM	1839	O	VAL	A	235	-11.848	-9.153	13.054	1.00	17.61	O
ATOM	1840	CB	VAL	A	235	-13.756	-7.164	14.556	1.00	14.01	C
ATOM	1841	CG1	VAL	A	235	-15.208	-7.513	14.660	1.00	14.30	C
ATOM	1842	CG2	VAL	A	235	-12.943	-8.102	15.421	1.00	14.29	C
ATOM	1843	N	THR	A	236	-13.808	-9.361	11.976	1.00	13.39	N
ATOM	1844	CA	THR	A	236	-13.512	-10.659	11.367	1.00	10.14	C
ATOM	1845	C	THR	A	236	-12.673	-10.444	10.102	1.00	12.00	C
ATOM	1846	O	THR	A	236	-11.962	-11.342	9.665	1.00	10.48	O
ATOM	1847	CB	THR	A	236	-14.803	-11.359	10.949	1.00	9.09	C
ATOM	1848	CG2	THR	A	236	-14.960	-12.671	11.657	1.00	10.99	C
ATOM	1849	OG1	THR	A	236	-15.914	-10.525	11.281	1.00	5.10	O
ATOM	1850	N	ASP	A	237	-12.708	-9.207	9.592	1.00	13.66	N
ATOM	1851	CA	ASP	A	237	-12.113	-8.807	8.320	1.00	12.69	C
ATOM	1852	C	ASP	A	237	-10.804	-8.086	8.567	1.00	16.23	C
ATOM	1853	O	ASP	A	237	-10.160	-7.609	7.622	1.00	17.55	O
ATOM	1854	CB	ASP	A	237	-13.052	-7.857	7.581	1.00	9.81	C
ATOM	1855	CG	ASP	A	237	-14.195	-8.580	6.879	1.00	15.79	C
ATOM	1856	OD1	ASP	A	237	-14.151	-9.824	6.788	1.00	20.11	O
ATOM	1857	OD2	ASP	A	237	-15.114	-7.914	6.350	1.00	14.61	O1-
ATOM	1858	N	LEU	A	238	-10.504	-7.875	9.849	1.00	17.84	N
ATOM	1859	CA	LEU	A	238	-9.376	-7.046	10.284	1.00	17.70	C
ATOM	1860	C	LEU	A	238	-8.366	-7.946	10.952	1.00	17.11	C
ATOM	1861	O	LEU	A	238	-7.171	-7.656	10.954	1.00	18.24	O
ATOM	1862	CB	LEU	A	238	-9.830	-6.016	11.310	1.00	18.48	C
ATOM	1863	CG	LEU	A	238	-9.252	-4.614	11.261	1.00	15.02	C
ATOM	1864	CD1	LEU	A	238	-10.258	-3.748	10.568	1.00	13.60	C
ATOM	1865	CD2	LEU	A	238	-8.989	-4.102	12.650	1.00	11.12	C
ATOM	1866	N	THR	A	239	-8.868	-8.928	11.684	1.00	15.12	N
ATOM	1867	CA	THR	A	239	-8.031	-10.025	12.104	1.00	15.74	C
ATOM	1868	C	THR	A	239	-7.229	-10.453	10.851	1.00	16.69	C
ATOM	1869	O	THR	A	239	-6.120	-9.942	10.661	1.00	18.36	O

ATOM	1870	CB	THR	A	239	-8.899	-11.180	12.745	1.00	15.86	C
ATOM	1871	CG2	THR	A	239	-8.061	-12.423	13.008	1.00	12.44	C
ATOM	1872	OG1	THR	A	239	-9.476	-10.724	13.988	1.00	7.33	O
ATOM	1873	N	LYS	A	240	-7.899	-11.064	9.873	1.00	15.75	N
ATOM	1874	CA	LYS	A	240	-7.262	-11.521	8.617	1.00	14.50	C
ATOM	1875	C	LYS	A	240	-6.100	-10.649	8.114	1.00	12.60	C
ATOM	1876	O	LYS	A	240	-5.042	-11.164	7.764	1.00	12.12	O
ATOM	1877	CB	LYS	A	240	-8.314	-11.608	7.513	1.00	13.34	C
ATOM	1878	CG	LYS	A	240	-8.390	-12.935	6.845	1.00	16.59	C
ATOM	1879	CD	LYS	A	240	-9.351	-12.874	5.664	1.00	23.14	C
ATOM	1880	CE	LYS	A	240	-8.943	-13.846	4.544	1.00	26.65	C
ATOM	1881	NZ	LYS	A	240	-7.629	-13.487	3.874	1.00	31.21	N1+
ATOM	1882	N	VAL	A	241	-6.361	-9.349	7.966	1.00	12.72	N
ATOM	1883	CA	VAL	A	241	-5.359	-8.348	7.614	1.00	9.66	C
ATOM	1884	C	VAL	A	241	-4.266	-8.481	8.636	1.00	11.94	C
ATOM	1885	O	VAL	A	241	-3.289	-9.155	8.386	1.00	14.55	O
ATOM	1886	CB	VAL	A	241	-5.909	-6.900	7.705	1.00	8.96	C
ATOM	1887	CG1	VAL	A	241	-4.808	-5.903	7.469	1.00	6.95	C
ATOM	1888	CG2	VAL	A	241	-7.030	-6.681	6.719	1.00	7.52	C
ATOM	1889	N	HIS	A	242	-4.541	-8.050	9.858	1.00	11.85	N
ATOM	1890	CA	HIS	A	242	-3.490	-7.939	10.863	1.00	17.50	C
ATOM	1891	C	HIS	A	242	-2.715	-9.236	11.110	1.00	19.56	C
ATOM	1892	O	HIS	A	242	-1.490	-9.212	11.321	1.00	19.10	O
ATOM	1893	CB	HIS	A	242	-4.071	-7.433	12.179	1.00	19.40	C
ATOM	1894	CG	HIS	A	242	-4.033	-5.949	12.311	1.00	17.51	C
ATOM	1895	CD2	HIS	A	242	-3.023	-5.113	12.638	1.00	17.18	C
ATOM	1896	ND1	HIS	A	242	-5.063	-5.146	11.870	1.00	14.59	N
ATOM	1897	CE1	HIS	A	242	-4.680	-3.885	11.896	1.00	14.07	C
ATOM	1898	NE2	HIS	A	242	-3.445	-3.842	12.360	1.00	20.83	N
ATOM	1899	N	THR	A	243	-3.419	-10.364	11.043	1.00	20.29	N
ATOM	1900	CA	THR	A	243	-2.791	-11.653	11.247	1.00	21.66	C
ATOM	1901	C	THR	A	243	-1.638	-11.802	10.259	1.00	22.36	C
ATOM	1902	O	THR	A	243	-0.494	-11.979	10.667	1.00	20.98	O
ATOM	1903	CB	THR	A	243	-3.803	-12.808	11.058	1.00	22.04	C
ATOM	1904	CG2	THR	A	243	-4.560	-13.061	12.338	1.00	19.78	C
ATOM	1905	OG1	THR	A	243	-4.743	-12.465	10.030	1.00	22.04	O
ATOM	1906	N	GLU	A	244	-1.923	-11.503	8.994	1.00	24.92	N
ATOM	1907	CA	GLU	A	244	-0.963	-11.634	7.884	1.00	24.81	C
ATOM	1908	C	GLU	A	244	0.269	-10.751	8.073	1.00	24.55	C
ATOM	1909	O	GLU	A	244	1.365	-11.289	8.316	1.00	25.76	O
ATOM	1910	CB	GLU	A	244	-1.654	-11.320	6.540	1.00	21.04	C
ATOM	1911	CG	GLU	A	244	-2.417	-12.526	5.981	1.00	20.42	C
ATOM	1912	CD	GLU	A	244	-3.749	-12.186	5.369	1.00	16.71	C
ATOM	1913	OE1	GLU	A	244	-3.861	-11.097	4.794	1.00	19.88	O
ATOM	1914	OE2	GLU	A	244	-4.670	-13.029	5.410	1.00	15.80	O1-
ATOM	1915	N	CYS	A	245	0.061	-9.426	8.150	1.00	23.02	N
ATOM	1916	CA	CYS	A	245	1.148	-8.466	8.429	1.00	21.48	C
ATOM	1917	C	CYS	A	245	1.936	-8.829	9.702	1.00	21.49	C
ATOM	1918	O	CYS	A	245	2.965	-8.215	10.000	1.00	20.53	O
ATOM	1919	CB	CYS	A	245	0.604	-7.039	8.577	1.00	20.81	C
ATOM	1920	SG	CYS	A	245	0.340	-6.068	7.058	1.00	19.72	S
ATOM	1921	N	CYS	A	246	1.434	-9.803	10.458	1.00	20.66	N
ATOM	1922	CA	CYS	A	246	2.133	-10.288	11.635	1.00	22.93	C
ATOM	1923	C	CYS	A	246	2.810	-11.634	11.342	1.00	23.54	C
ATOM	1924	O	CYS	A	246	4.001	-11.829	11.613	1.00	23.49	O
ATOM	1925	CB	CYS	A	246	1.150	-10.431	12.828	1.00	23.38	C
ATOM	1926	SG	CYS	A	246	0.340	-8.909	13.476	1.00	21.26	S
ATOM	1927	N	HIS	A	247	2.054	-12.531	10.717	1.00	26.98	N
ATOM	1928	CA	HIS	A	247	2.461	-13.924	10.463	1.00	28.41	C
ATOM	1929	C	HIS	A	247	3.551	-14.018	9.371	1.00	27.16	C
ATOM	1930	O	HIS	A	247	3.999	-15.107	8.996	1.00	24.90	O
ATOM	1931	CB	HIS	A	247	1.221	-14.734	10.034	1.00	30.64	C
ATOM	1932	CG	HIS	A	247	0.887	-15.871	10.953	1.00	33.09	C
ATOM	1933	CD2	HIS	A	247	1.675	-16.666	11.718	1.00	31.19	C
ATOM	1934	ND1	HIS	A	247	-0.397	-16.372	11.077	1.00	32.64	N
ATOM	1935	CE1	HIS	A	247	-0.383	-17.423	11.881	1.00	32.18	C
ATOM	1936	NE2	HIS	A	247	0.859	-17.616	12.285	1.00	34.75	N
ATOM	1937	N	GLY	A	248	3.882	-12.875	8.788	1.00	26.19	N
ATOM	1938	CA	GLY	A	248	5.010	-12.822	7.893	1.00	24.62	C
ATOM	1939	C	GLY	A	248	4.560	-12.235	6.584	1.00	24.54	C
ATOM	1940	O	GLY	A	248	5.066	-11.200	6.176	1.00	25.55	O

ATOM	1941	N	ASP	A	249	3.553	-12.847	5.966	1.00	23.88	N
ATOM	1942	CA	ASP	A	249	3.154	-12.470	4.619	1.00	20.47	C
ATOM	1943	C	ASP	A	249	2.317	-11.215	4.621	1.00	20.76	C
ATOM	1944	O	ASP	A	249	1.132	-11.257	4.957	1.00	21.26	O
ATOM	1945	CB	ASP	A	249	2.408	-13.612	3.903	1.00	20.40	C
ATOM	1946	CG	ASP	A	249	1.351	-14.282	4.764	1.00	18.24	C
ATOM	1947	OD1	ASP	A	249	1.703	-15.199	5.537	1.00	19.57	O
ATOM	1948	OD2	ASP	A	249	0.152	-14.040	4.523	1.00	17.76	O1-
ATOM	1949	N	LEU	A	250	3.003	-10.087	4.423	1.00	20.08	N
ATOM	1950	CA	LEU	A	250	2.373	-8.789	4.180	1.00	20.75	C
ATOM	1951	C	LEU	A	250	1.422	-8.841	2.956	1.00	23.97	C
ATOM	1952	O	LEU	A	250	0.246	-9.180	3.084	1.00	24.23	O
ATOM	1953	CB	LEU	A	250	3.427	-7.715	3.892	1.00	18.42	C
ATOM	1954	CG	LEU	A	250	4.765	-7.394	4.537	1.00	17.52	C
ATOM	1955	CD1	LEU	A	250	5.333	-8.472	5.381	1.00	20.69	C
ATOM	1956	CD2	LEU	A	250	5.689	-7.106	3.393	1.00	20.41	C
ATOM	1957	N	LEU	A	251	1.964	-8.473	1.788	1.00	24.70	N
ATOM	1958	CA	LEU	A	251	1.273	-8.329	0.499	1.00	21.99	C
ATOM	1959	C	LEU	A	251	-0.227	-8.608	0.403	1.00	22.01	C
ATOM	1960	O	LEU	A	251	-0.983	-7.834	-0.179	1.00	19.96	O
ATOM	1961	CB	LEU	A	251	2.016	-9.161	-0.540	1.00	22.73	C
ATOM	1962	CG	LEU	A	251	3.503	-8.825	-0.674	1.00	21.62	C
ATOM	1963	CD1	LEU	A	251	4.302	-9.609	0.354	1.00	22.59	C
ATOM	1964	CD2	LEU	A	251	3.972	-9.145	-2.085	1.00	20.79	C
ATOM	1965	N	GLU	A	252	-0.633	-9.779	0.856	1.00	23.52	N
ATOM	1966	CA	GLU	A	252	-2.053	-10.078	0.994	1.00	24.95	C
ATOM	1967	C	GLU	A	252	-2.699	-8.956	1.840	1.00	25.20	C
ATOM	1968	O	GLU	A	252	-3.583	-8.247	1.364	1.00	26.85	O
ATOM	1969	CB	GLU	A	252	-2.225	-11.463	1.648	1.00	23.50	C
ATOM	1970	CG	GLU	A	252	-1.702	-12.659	0.793	1.00	23.59	C
ATOM	1971	CD	GLU	A	252	-0.211	-12.968	0.966	1.00	22.46	C
ATOM	1972	OE1	GLU	A	252	0.548	-12.064	1.372	1.00	21.42	O
ATOM	1973	OE2	GLU	A	252	0.212	-14.112	0.667	1.00	20.54	O1-
ATOM	1974	N	CYS	A	253	-2.113	-8.683	3.002	1.00	23.06	N
ATOM	1975	CA	CYS	A	253	-2.418	-7.509	3.825	1.00	21.89	C
ATOM	1976	C	CYS	A	253	-2.879	-6.277	3.017	1.00	22.51	C
ATOM	1977	O	CYS	A	253	-4.077	-5.982	2.928	1.00	18.60	O
ATOM	1978	CB	CYS	A	253	-1.171	-7.153	4.662	1.00	20.32	C
ATOM	1979	SG	CYS	A	253	-1.466	-6.653	6.385	1.00	15.33	S
ATOM	1980	N	ALA	A	254	-1.921	-5.638	2.345	1.00	22.49	N
ATOM	1981	CA	ALA	A	254	-2.105	-4.310	1.755	1.00	22.36	C
ATOM	1982	C	ALA	A	254	-3.233	-4.310	0.727	1.00	22.41	C
ATOM	1983	O	ALA	A	254	-3.812	-3.264	0.430	1.00	20.73	O
ATOM	1984	CB	ALA	A	254	-0.785	-3.836	1.104	1.00	20.82	C
ATOM	1985	N	ASP	A	255	-3.433	-5.475	0.108	1.00	23.61	N
ATOM	1986	CA	ASP	A	255	-4.448	-5.684	-0.918	1.00	23.62	C
ATOM	1987	C	ASP	A	255	-5.725	-5.744	-0.112	1.00	24.73	C
ATOM	1988	O	ASP	A	255	-6.638	-4.941	-0.353	1.00	25.80	O
ATOM	1989	CB	ASP	A	255	-4.205	-7.026	-1.648	1.00	24.09	C
ATOM	1990	CG	ASP	A	255	-5.128	-7.234	-2.858	1.00	26.69	C
ATOM	1991	OD1	ASP	A	255	-5.894	-6.309	-3.200	1.00	28.50	O
ATOM	1992	OD2	ASP	A	255	-5.063	-8.310	-3.507	1.00	25.31	O1-
ATOM	1993	N	ASP	A	256	-5.645	-6.478	1.009	1.00	24.05	N
ATOM	1994	CA	ASP	A	256	-6.778	-6.758	1.893	1.00	21.53	C
ATOM	1995	C	ASP	A	256	-7.408	-5.507	2.499	1.00	22.11	C
ATOM	1996	O	ASP	A	256	-8.603	-5.319	2.331	1.00	21.08	O
ATOM	1997	CB	ASP	A	256	-6.375	-7.720	3.009	1.00	19.32	C
ATOM	1998	CG	ASP	A	256	-6.474	-9.182	2.594	1.00	21.17	C
ATOM	1999	OD1	ASP	A	256	-7.390	-9.548	1.814	1.00	17.48	O
ATOM	2000	OD2	ASP	A	256	-5.650	-9.984	3.094	1.00	19.56	O1-
ATOM	2001	N	ARG	A	257	-6.624	-4.584	3.069	1.00	22.19	N
ATOM	2002	CA	ARG	A	257	-7.214	-3.327	3.566	1.00	22.80	C
ATOM	2003	C	ARG	A	257	-7.861	-2.446	2.497	1.00	23.33	C
ATOM	2004	O	ARG	A	257	-8.179	-1.277	2.756	1.00	24.22	O
ATOM	2005	CB	ARG	A	257	-6.212	-2.474	4.344	1.00	23.48	C
ATOM	2006	CG	ARG	A	257	-6.912	-1.398	5.220	1.00	26.53	C
ATOM	2007	CD	ARG	A	257	-6.367	-1.389	6.660	1.00	32.02	C
ATOM	2008	NE	ARG	A	257	-7.343	-1.126	7.730	1.00	29.83	N
ATOM	2009	CZ	ARG	A	257	-6.970	-0.900	8.990	1.00	29.33	C
ATOM	2010	NH1	ARG	A	257	-5.677	-0.815	9.258	1.00	31.19	N1+
ATOM	2011	NH2	ARG	A	257	-7.857	-0.700	9.970	1.00	27.88	N

ATOM	2012	N	ALA	A	258	-8.016	-2.989	1.288	1.00	23.60	N
ATOM	2013	CA	ALA	A	258	-8.843	-2.381	0.247	1.00	19.06	C
ATOM	2014	C	ALA	A	258	-9.853	-3.397	-0.273	1.00	17.21	C
ATOM	2015	O	ALA	A	258	-11.020	-3.095	-0.345	1.00	16.88	O
ATOM	2016	CB	ALA	A	258	-7.989	-1.870	-0.849	1.00	17.23	C
ATOM	2017	N	ASP	A	259	-9.464	-4.662	-0.292	1.00	18.75	N
ATOM	2018	CA	ASP	A	259	-10.430	-5.768	-0.205	1.00	21.08	C
ATOM	2019	C	ASP	A	259	-11.253	-5.577	1.090	1.00	19.96	C
ATOM	2020	O	ASP	A	259	-12.159	-6.365	1.380	1.00	20.42	O
ATOM	2021	CB	ASP	A	259	-9.690	-7.150	-0.180	1.00	24.22	C
ATOM	2022	CG	ASP	A	259	-10.169	-8.150	-1.288	1.00	21.26	C
ATOM	2023	OD1	ASP	A	259	-11.075	-7.821	-2.076	1.00	21.43	O
ATOM	2024	OD2	ASP	A	259	-9.634	-9.279	-1.364	1.00	17.32	O1-
ATOM	2025	N	LEU	A	260	-10.848	-4.617	1.924	1.00	18.38	N
ATOM	2026	CA	LEU	A	260	-11.732	-4.087	2.948	1.00	19.05	C
ATOM	2027	C	LEU	A	260	-12.198	-2.692	2.561	1.00	20.78	C
ATOM	2028	O	LEU	A	260	-13.257	-2.581	1.950	1.00	22.27	O
ATOM	2029	CB	LEU	A	260	-11.087	-4.076	4.334	1.00	18.98	C
ATOM	2030	CG	LEU	A	260	-11.986	-4.337	5.564	1.00	15.64	C
ATOM	2031	CD1	LEU	A	260	-11.913	-3.163	6.525	1.00	14.71	C
ATOM	2032	CD2	LEU	A	260	-13.418	-4.561	5.153	1.00	12.68	C
ATOM	2033	N	ALA	A	261	-11.398	-1.651	2.801	1.00	19.14	N
ATOM	2034	CA	ALA	A	261	-11.884	-0.274	2.617	1.00	20.29	C
ATOM	2035	C	ALA	A	261	-12.836	-0.069	1.445	1.00	20.76	C
ATOM	2036	O	ALA	A	261	-13.748	0.727	1.551	1.00	23.76	O
ATOM	2037	CB	ALA	A	261	-10.738	0.703	2.506	1.00	20.41	C
ATOM	2038	N	LYS	A	262	-12.715	-0.870	0.390	1.00	21.67	N
ATOM	2039	CA	LYS	A	262	-13.724	-0.914	-0.678	1.00	22.13	C
ATOM	2040	C	LYS	A	262	-14.858	-1.897	-0.338	1.00	22.91	C
ATOM	2041	O	LYS	A	262	-15.231	-2.735	-1.178	1.00	24.14	O
ATOM	2042	CB	LYS	A	262	-13.079	-1.319	-2.018	1.00	21.14	C
ATOM	2043	CG	LYS	A	262	-12.745	-0.182	-2.958	1.00	20.45	C
ATOM	2044	CD	LYS	A	262	-13.871	0.032	-3.965	1.00	22.63	C
ATOM	2045	CE	LYS	A	262	-13.416	0.915	-5.138	1.00	22.50	C
ATOM	2046	NZ	LYS	A	262	-13.721	0.318	-6.475	1.00	18.96	N1+
ATOM	2047	N	TYR	A	263	-15.279	-1.881	0.933	1.00	20.93	N
ATOM	2048	CA	TYR	A	263	-16.547	-2.447	1.416	1.00	15.95	C
ATOM	2049	C	TYR	A	263	-17.010	-1.449	2.439	1.00	14.10	C
ATOM	2050	O	TYR	A	263	-17.949	-0.720	2.178	1.00	16.17	O
ATOM	2051	CB	TYR	A	263	-16.349	-3.803	2.096	1.00	16.93	C
ATOM	2052	CG	TYR	A	263	-17.327	-4.107	3.212	1.00	14.41	C
ATOM	2053	CD1	TYR	A	263	-18.595	-4.556	2.931	1.00	17.78	C
ATOM	2054	CD2	TYR	A	263	-17.055	-3.743	4.505	1.00	15.15	C
ATOM	2055	CE1	TYR	A	263	-19.577	-4.581	3.889	1.00	17.72	C
ATOM	2056	CE2	TYR	A	263	-18.025	-3.763	5.472	1.00	16.35	C
ATOM	2057	CZ	TYR	A	263	-19.294	-4.157	5.153	1.00	17.14	C
ATOM	2058	OH	TYR	A	263	-20.326	-3.914	6.025	1.00	18.82	O
ATOM	2059	N	ILE	A	264	-16.205	-1.275	3.488	1.00	13.60	N
ATOM	2060	CA	ILE	A	264	-16.396	-0.224	4.502	1.00	13.72	C
ATOM	2061	C	ILE	A	264	-16.916	0.992	3.801	1.00	14.67	C
ATOM	2062	O	ILE	A	264	-18.082	1.333	3.943	1.00	16.24	O
ATOM	2063	CB	ILE	A	264	-15.058	0.192	5.230	1.00	11.33	C
ATOM	2064	CG1	ILE	A	264	-14.910	-0.527	6.568	1.00	9.86	C
ATOM	2065	CG2	ILE	A	264	-15.057	1.676	5.551	1.00	12.03	C
ATOM	2066	CD1	ILE	A	264	-13.924	0.134	7.518	1.00	8.24	C
ATOM	2067	N	CYS	A	265	-16.146	1.431	2.817	1.00	18.20	N
ATOM	2068	CA	CYS	A	265	-16.409	2.706	2.184	1.00	21.00	C
ATOM	2069	C	CYS	A	265	-17.183	2.683	0.863	1.00	20.34	C
ATOM	2070	O	CYS	A	265	-17.164	3.648	0.104	1.00	18.15	O
ATOM	2071	CB	CYS	A	265	-15.131	3.508	2.016	1.00	18.44	C
ATOM	2072	SG	CYS	A	265	-15.717	5.147	1.584	1.00	24.42	S
ATOM	2073	N	GLU	A	266	-17.927	1.612	0.630	1.00	22.55	N
ATOM	2074	CA	GLU	A	266	-19.044	1.668	-0.305	1.00	25.71	C
ATOM	2075	C	GLU	A	266	-20.359	1.649	0.507	1.00	25.99	C
ATOM	2076	O	GLU	A	266	-21.401	2.132	0.031	1.00	24.57	O
ATOM	2077	CB	GLU	A	266	-18.982	0.486	-1.306	1.00	30.26	C
ATOM	2078	CG	GLU	A	266	-18.126	0.746	-2.589	1.00	33.40	C
ATOM	2079	CD	GLU	A	266	-18.430	-0.224	-3.755	1.00	33.38	C
ATOM	2080	OE1	GLU	A	266	-19.340	0.064	-4.569	1.00	34.65	O
ATOM	2081	OE2	GLU	A	266	-17.702	-1.226	-3.918	1.00	31.65	O1-
ATOM	2082	N	ASN	A	267	-20.231	1.304	1.792	1.00	24.11	N

ATOM	2083	CA	ASN	A	267	-21.367	1.133	2.693	1.00	24.75	C
ATOM	2084	C	ASN	A	267	-21.562	2.304	3.675	1.00	25.96	C
ATOM	2085	O	ASN	A	267	-22.551	2.367	4.425	1.00	24.17	O
ATOM	2086	CB	ASN	A	267	-21.201	-0.171	3.465	1.00	25.26	C
ATOM	2087	CG	ASN	A	267	-21.552	-1.388	2.630	1.00	26.30	C
ATOM	2088	ND2	ASN	A	267	-21.767	-2.527	3.293	1.00	23.38	N
ATOM	2089	OD1	ASN	A	267	-21.602	-1.314	1.394	1.00	28.38	O
ATOM	2090	N	GLN	A	268	-20.543	3.150	3.756	1.00	27.51	N
ATOM	2091	CA	GLN	A	268	-20.619	4.455	4.422	1.00	26.43	C
ATOM	2092	C	GLN	A	268	-21.731	4.680	5.469	1.00	25.52	C
ATOM	2093	O	GLN	A	268	-21.432	5.026	6.604	1.00	23.74	O
ATOM	2094	CB	GLN	A	268	-20.693	5.552	3.354	1.00	24.02	C
ATOM	2095	CG	GLN	A	268	-19.418	6.340	3.149	1.00	20.44	C
ATOM	2096	CD	GLN	A	268	-19.711	7.673	2.493	1.00	23.29	C
ATOM	2097	NE2	GLN	A	268	-18.762	8.607	2.568	1.00	22.63	N
ATOM	2098	OE1	GLN	A	268	-20.807	7.873	1.949	1.00	24.24	O
ATOM	2099	N	ASP	A	269	-22.993	4.648	5.054	1.00	25.35	N
ATOM	2100	CA	ASP	A	269	-24.064	5.203	5.882	1.00	26.24	C
ATOM	2101	C	ASP	A	269	-24.667	4.170	6.833	1.00	28.27	C
ATOM	2102	O	ASP	A	269	-25.243	4.533	7.873	1.00	29.26	O
ATOM	2103	CB	ASP	A	269	-25.180	5.803	5.009	1.00	27.91	C
ATOM	2104	CG	ASP	A	269	-25.889	4.753	4.153	1.00	29.64	C
ATOM	2105	OD1	ASP	A	269	-25.178	3.900	3.565	1.00	30.12	O
ATOM	2106	OD2	ASP	A	269	-27.151	4.754	4.103	1.00	29.00	O1-
ATOM	2107	N	SER	A	270	-24.536	2.886	6.501	1.00	27.48	N
ATOM	2108	CA	SER	A	270	-24.993	1.847	7.413	1.00	26.75	C
ATOM	2109	C	SER	A	270	-23.949	1.519	8.504	1.00	26.55	C
ATOM	2110	O	SER	A	270	-24.139	0.582	9.286	1.00	26.34	O
ATOM	2111	CB	SER	A	270	-25.359	0.589	6.623	1.00	28.19	C
ATOM	2112	OG	SER	A	270	-24.224	0.037	5.957	1.00	30.87	O
ATOM	2113	N	ILE	A	271	-22.895	2.329	8.614	1.00	25.27	N
ATOM	2114	CA	ILE	A	271	-21.741	1.967	9.420	1.00	24.11	C
ATOM	2115	C	ILE	A	271	-21.253	3.034	10.393	1.00	25.93	C
ATOM	2116	O	ILE	A	271	-21.228	2.784	11.593	1.00	27.16	O
ATOM	2117	CB	ILE	A	271	-20.578	1.539	8.535	1.00	25.05	C
ATOM	2118	CG1	ILE	A	271	-20.832	0.113	8.013	1.00	27.97	C
ATOM	2119	CG2	ILE	A	271	-19.278	1.600	9.305	1.00	24.66	C
ATOM	2120	CD1	ILE	A	271	-19.661	-0.523	7.232	1.00	23.58	C
ATOM	2121	N	SER	A	272	-20.749	4.167	9.908	1.00	27.76	N
ATOM	2122	CA	SER	A	272	-20.329	5.238	10.836	1.00	28.74	C
ATOM	2123	C	SER	A	272	-20.165	6.631	10.227	1.00	27.74	C
ATOM	2124	O	SER	A	272	-19.123	7.259	10.418	1.00	26.72	O
ATOM	2125	CB	SER	A	272	-19.018	4.837	11.530	1.00	30.16	C
ATOM	2126	OG	SER	A	272	-18.380	5.901	12.239	1.00	27.56	O
ATOM	2127	N	SER	A	273	-21.257	7.182	9.701	1.00	27.40	N
ATOM	2128	CA	SER	A	273	-21.236	8.458	8.970	1.00	26.73	C
ATOM	2129	C	SER	A	273	-19.842	9.066	8.643	1.00	25.15	C
ATOM	2130	O	SER	A	273	-19.475	9.204	7.468	1.00	20.82	O
ATOM	2131	CB	SER	A	273	-22.110	9.495	9.714	1.00	25.04	C
ATOM	2132	OG	SER	A	273	-21.417	10.725	9.872	1.00	24.31	O
ATOM	2133	N	LYS	A	274	-19.104	9.433	9.697	1.00	24.05	N
ATOM	2134	CA	LYS	A	274	-17.875	10.230	9.625	1.00	24.74	C
ATOM	2135	C	LYS	A	274	-16.764	9.750	8.705	1.00	22.58	C
ATOM	2136	O	LYS	A	274	-15.721	10.376	8.669	1.00	21.30	O
ATOM	2137	CB	LYS	A	274	-17.260	10.431	11.024	1.00	25.80	C
ATOM	2138	CG	LYS	A	274	-18.220	10.937	12.072	1.00	29.40	C
ATOM	2139	CD	LYS	A	274	-18.241	12.437	12.131	1.00	33.71	C
ATOM	2140	CE	LYS	A	274	-18.315	12.928	13.589	1.00	34.96	C
ATOM	2141	NZ	LYS	A	274	-17.356	14.082	13.815	1.00	34.17	N1+
ATOM	2142	N	LEU	A	275	-16.941	8.657	7.970	1.00	23.57	N
ATOM	2143	CA	LEU	A	275	-15.937	8.325	6.959	1.00	23.18	C
ATOM	2144	C	LEU	A	275	-16.330	8.834	5.585	1.00	22.54	C
ATOM	2145	O	LEU	A	275	-16.224	8.104	4.610	1.00	21.30	O
ATOM	2146	CB	LEU	A	275	-15.652	6.828	6.872	1.00	21.39	C
ATOM	2147	CG	LEU	A	275	-16.319	5.772	7.741	1.00	23.35	C
ATOM	2148	CD1	LEU	A	275	-17.580	5.221	7.072	1.00	23.95	C
ATOM	2149	CD2	LEU	A	275	-15.319	4.663	7.986	1.00	22.41	C
ATOM	2150	N	LYS	A	276	-16.828	10.073	5.514	1.00	25.95	N
ATOM	2151	CA	LYS	A	276	-16.886	10.830	4.247	1.00	26.73	C
ATOM	2152	C	LYS	A	276	-15.478	11.187	3.799	1.00	25.18	C
ATOM	2153	O	LYS	A	276	-14.865	10.434	3.052	1.00	25.22	O

ATOM	2154	CB	LYS	A	276	-17.710	12.129	4.402	1.00	29.83	C
ATOM	2155	CG	LYS	A	276	-17.702	12.805	5.801	1.00	30.45	C
ATOM	2156	CD	LYS	A	276	-16.755	14.005	5.874	1.00	30.09	C
ATOM	2157	CE	LYS	A	276	-16.974	14.966	4.712	1.00	31.30	C
ATOM	2158	NZ	LYS	A	276	-18.160	15.877	4.882	1.00	29.48	N1+
ATOM	2159	N	GLU	A	277	-14.899	12.172	4.482	1.00	25.27	N
ATOM	2160	CA	GLU	A	277	-13.552	12.674	4.211	1.00	26.60	C
ATOM	2161	C	GLU	A	277	-12.640	11.674	3.545	1.00	25.74	C
ATOM	2162	O	GLU	A	277	-12.369	11.752	2.348	1.00	25.45	O
ATOM	2163	CB	GLU	A	277	-12.899	13.131	5.511	1.00	26.87	C
ATOM	2164	CG	GLU	A	277	-13.175	14.597	5.841	1.00	31.72	C
ATOM	2165	CD	GLU	A	277	-12.559	15.583	4.830	1.00	30.45	C
ATOM	2166	OE1	GLU	A	277	-13.198	15.870	3.787	1.00	27.15	O
ATOM	2167	OE2	GLU	A	277	-11.473	16.133	5.136	1.00	30.36	O1-
ATOM	2168	N	CYS	A	278	-12.396	10.601	4.270	1.00	26.80	N
ATOM	2169	CA	CYS	A	278	-11.438	9.582	3.859	1.00	27.12	C
ATOM	2170	C	CYS	A	278	-12.143	8.579	2.975	1.00	23.38	C
ATOM	2171	O	CYS	A	278	-12.167	7.391	3.233	1.00	24.65	O
ATOM	2172	CB	CYS	A	278	-10.871	8.920	5.104	1.00	31.72	C
ATOM	2173	SG	CYS	A	278	-11.643	9.660	6.586	1.00	33.14	S
ATOM	2174	N	CYS	A	279	-12.574	9.086	1.842	1.00	21.92	N
ATOM	2175	CA	CYS	A	279	-13.315	8.339	0.856	1.00	20.79	C
ATOM	2176	C	CYS	A	279	-13.460	9.359	-0.255	1.00	21.27	C
ATOM	2177	O	CYS	A	279	-13.962	9.073	-1.350	1.00	22.78	O
ATOM	2178	CB	CYS	A	279	-14.661	7.929	1.439	1.00	19.99	C
ATOM	2179	SG	CYS	A	279	-14.510	6.478	2.522	1.00	21.12	S
ATOM	2180	N	GLU	A	280	-13.143	10.594	0.107	1.00	18.93	N
ATOM	2181	CA	GLU	A	280	-12.521	11.517	-0.799	1.00	19.87	C
ATOM	2182	C	GLU	A	280	-11.046	11.586	-0.419	1.00	21.37	C
ATOM	2183	O	GLU	A	280	-10.570	12.645	-0.028	1.00	22.62	O
ATOM	2184	CB	GLU	A	280	-13.152	12.896	-0.661	1.00	19.56	C
ATOM	2185	CG	GLU	A	280	-14.562	12.867	-0.153	1.00	22.77	C
ATOM	2186	CD	GLU	A	280	-15.551	12.438	-1.207	1.00	24.09	C
ATOM	2187	OE1	GLU	A	280	-15.638	11.225	-1.511	1.00	22.38	O
ATOM	2188	OE2	GLU	A	280	-16.260	13.325	-1.723	1.00	26.29	O1-
ATOM	2189	N	LYS	A	281	-10.362	10.437	-0.413	1.00	21.75	N
ATOM	2190	CA	LYS	A	281	-8.896	10.399	-0.281	1.00	22.31	C
ATOM	2191	C	LYS	A	281	-8.246	9.170	-0.941	1.00	23.66	C
ATOM	2192	O	LYS	A	281	-8.367	8.041	-0.431	1.00	25.63	O
ATOM	2193	CB	LYS	A	281	-8.474	10.459	1.188	1.00	19.47	C
ATOM	2194	CG	LYS	A	281	-8.113	11.852	1.682	1.00	21.76	C
ATOM	2195	CD	LYS	A	281	-8.906	12.198	2.952	1.00	25.79	C
ATOM	2196	CE	LYS	A	281	-8.282	13.351	3.761	1.00	27.84	C
ATOM	2197	NZ	LYS	A	281	-7.158	12.950	4.670	1.00	23.24	N1+
ATOM	2198	N	PRO	A	282	-7.451	9.396	-2.015	1.00	20.78	N
ATOM	2199	CA	PRO	A	282	-6.604	8.401	-2.683	1.00	19.52	C
ATOM	2200	C	PRO	A	282	-6.214	7.216	-1.818	1.00	19.87	C
ATOM	2201	O	PRO	A	282	-5.362	7.365	-0.939	1.00	19.82	O
ATOM	2202	CB	PRO	A	282	-5.376	9.210	-3.100	1.00	16.20	C
ATOM	2203	CG	PRO	A	282	-5.586	10.592	-2.507	1.00	15.71	C
ATOM	2204	CD	PRO	A	282	-7.052	10.740	-2.438	1.00	17.15	C
ATOM	2205	N	LEU	A	283	-6.642	6.027	-2.254	1.00	20.57	N
ATOM	2206	CA	LEU	A	283	-6.610	4.787	-1.461	1.00	20.98	C
ATOM	2207	C	LEU	A	283	-5.739	4.913	-0.252	1.00	20.62	C
ATOM	2208	O	LEU	A	283	-6.176	5.479	0.723	1.00	18.64	O
ATOM	2209	CB	LEU	A	283	-6.147	3.585	-2.288	1.00	22.23	C
ATOM	2210	CG	LEU	A	283	-6.130	2.292	-1.452	1.00	23.90	C
ATOM	2211	CD1	LEU	A	283	-7.217	1.299	-1.964	1.00	22.21	C
ATOM	2212	CD2	LEU	A	283	-4.730	1.673	-1.500	1.00	20.45	C
ATOM	2213	N	LEU	A	284	-4.471	4.536	-0.395	1.00	22.99	N
ATOM	2214	CA	LEU	A	284	-3.396	4.918	0.519	1.00	26.73	C
ATOM	2215	C	LEU	A	284	-3.912	5.607	1.803	1.00	28.33	C
ATOM	2216	O	LEU	A	284	-4.326	4.906	2.739	1.00	28.88	O
ATOM	2217	CB	LEU	A	284	-2.385	5.825	-0.225	1.00	28.31	C
ATOM	2218	CG	LEU	A	284	-1.765	5.434	-1.595	1.00	26.94	C
ATOM	2219	CD1	LEU	A	284	-1.303	6.690	-2.364	1.00	20.85	C
ATOM	2220	CD2	LEU	A	284	-0.594	4.469	-1.384	1.00	26.30	C
ATOM	2221	N	GLU	A	285	-4.223	6.906	1.683	1.00	28.79	N
ATOM	2222	CA	GLU	A	285	-4.614	7.759	2.825	1.00	28.34	C
ATOM	2223	C	GLU	A	285	-6.001	7.475	3.396	1.00	26.33	C
ATOM	2224	O	GLU	A	285	-6.293	7.857	4.516	1.00	28.65	O

ATOM	2225	CB	GLU	A	285	-4.542	9.247	2.462	1.00	28.57	C
ATOM	2226	CG	GLU	A	285	-3.144	9.754	2.142	1.00	29.88	C
ATOM	2227	CD	GLU	A	285	-3.105	10.581	0.870	1.00	30.17	C
ATOM	2228	OE1	GLU	A	285	-3.483	11.778	0.920	1.00	29.25	O
ATOM	2229	OE2	GLU	A	285	-2.744	10.009	-0.185	1.00	28.46	O1-
ATOM	2230	N	LYS	A	286	-6.880	6.870	2.617	1.00	26.40	N
ATOM	2231	CA	LYS	A	286	-8.030	6.193	3.204	1.00	26.58	C
ATOM	2232	C	LYS	A	286	-7.525	5.430	4.440	1.00	24.48	C
ATOM	2233	O	LYS	A	286	-7.732	5.868	5.567	1.00	25.77	O
ATOM	2234	CB	LYS	A	286	-8.650	5.179	2.218	1.00	27.97	C
ATOM	2235	CG	LYS	A	286	-9.914	5.578	1.425	1.00	19.93	C
ATOM	2236	CD	LYS	A	286	-10.135	4.498	0.364	1.00	19.31	C
ATOM	2237	CE	LYS	A	286	-11.548	4.386	-0.099	1.00	16.08	C
ATOM	2238	NZ	LYS	A	286	-12.013	5.632	-0.734	1.00	16.67	N1+
ATOM	2239	N	SER	A	287	-6.716	4.406	4.244	1.00	19.71	N
ATOM	2240	CA	SER	A	287	-6.403	3.545	5.359	1.00	19.25	C
ATOM	2241	C	SER	A	287	-5.478	4.164	6.423	1.00	19.83	C
ATOM	2242	O	SER	A	287	-4.917	3.451	7.252	1.00	19.56	O
ATOM	2243	CB	SER	A	287	-5.832	2.230	4.832	1.00	22.16	C
ATOM	2244	OG	SER	A	287	-6.709	1.646	3.874	1.00	24.16	O
ATOM	2245	N	HIS	A	288	-5.335	5.486	6.427	1.00	20.41	N
ATOM	2246	CA	HIS	A	288	-4.825	6.194	7.611	1.00	23.21	C
ATOM	2247	C	HIS	A	288	-5.564	7.515	7.785	1.00	24.49	C
ATOM	2248	O	HIS	A	288	-4.955	8.582	7.929	1.00	24.42	O
ATOM	2249	CB	HIS	A	288	-3.315	6.446	7.531	1.00	23.44	C
ATOM	2250	CG	HIS	A	288	-2.712	6.985	8.800	1.00	24.13	C
ATOM	2251	CD2	HIS	A	288	-2.834	8.190	9.411	1.00	22.19	C
ATOM	2252	ND1	HIS	A	288	-1.809	6.267	9.556	1.00	25.67	N
ATOM	2253	CE1	HIS	A	288	-1.401	7.001	10.576	1.00	23.98	C
ATOM	2254	NE2	HIS	A	288	-2.009	8.172	10.512	1.00	26.26	N
ATOM	2255	N	CYS	A	289	-6.865	7.447	7.540	1.00	25.16	N
ATOM	2256	CA	CYS	A	289	-7.819	8.301	8.209	1.00	26.57	C
ATOM	2257	C	CYS	A	289	-8.701	7.377	9.055	1.00	25.76	C
ATOM	2258	O	CYS	A	289	-9.060	7.710	10.192	1.00	26.10	O
ATOM	2259	CB	CYS	A	289	-8.716	9.020	7.218	1.00	26.87	C
ATOM	2260	SG	CYS	A	289	-10.336	9.115	8.027	1.00	35.83	S
ATOM	2261	N	ILE	A	290	-9.231	6.354	8.381	1.00	23.01	N
ATOM	2262	CA	ILE	A	290	-9.982	5.262	8.996	1.00	20.80	C
ATOM	2263	C	ILE	A	290	-9.125	4.551	10.043	1.00	21.11	C
ATOM	2264	O	ILE	A	290	-9.551	4.335	11.168	1.00	22.48	O
ATOM	2265	CB	ILE	A	290	-10.432	4.241	7.920	1.00	17.33	C
ATOM	2266	CG1	ILE	A	290	-11.770	4.670	7.312	1.00	16.61	C
ATOM	2267	CG2	ILE	A	290	-10.558	2.866	8.514	1.00	19.50	C
ATOM	2268	CD1	ILE	A	290	-11.867	4.462	5.808	1.00	11.81	C
ATOM	2269	N	ALA	A	291	-7.920	4.156	9.665	1.00	20.66	N
ATOM	2270	CA	ALA	A	291	-6.948	3.747	10.664	1.00	20.97	C
ATOM	2271	C	ALA	A	291	-6.893	4.911	11.619	1.00	19.91	C
ATOM	2272	O	ALA	A	291	-7.270	6.008	11.249	1.00	18.39	O
ATOM	2273	CB	ALA	A	291	-5.583	3.518	10.024	1.00	21.17	C
ATOM	2274	N	GLU	A	292	-6.302	4.720	12.784	1.00	21.16	N
ATOM	2275	CA	GLU	A	292	-6.572	5.631	13.881	1.00	24.55	C
ATOM	2276	C	GLU	A	292	-6.249	7.130	13.695	1.00	26.59	C
ATOM	2277	O	GLU	A	292	-5.185	7.622	14.100	1.00	27.80	O
ATOM	2278	CB	GLU	A	292	-5.962	5.076	15.170	1.00	24.02	C
ATOM	2279	CG	GLU	A	292	-6.808	3.952	15.736	1.00	23.17	C
ATOM	2280	CD	GLU	A	292	-6.260	3.354	17.010	1.00	25.80	C
ATOM	2281	OE1	GLU	A	292	-6.050	4.132	17.989	1.00	23.17	O
ATOM	2282	OE2	GLU	A	292	-6.112	2.098	17.040	1.00	20.76	O1-
ATOM	2283	N	VAL	A	293	-7.121	7.800	12.940	1.00	26.75	N
ATOM	2284	CA	VAL	A	293	-7.593	9.139	13.260	1.00	26.08	C
ATOM	2285	C	VAL	A	293	-9.082	9.127	12.906	1.00	26.05	C
ATOM	2286	O	VAL	A	293	-9.506	9.564	11.824	1.00	23.87	O
ATOM	2287	CB	VAL	A	293	-6.824	10.236	12.489	1.00	26.52	C
ATOM	2288	CG1	VAL	A	293	-7.586	11.572	12.540	1.00	23.04	C
ATOM	2289	CG2	VAL	A	293	-5.434	10.417	13.116	1.00	25.28	C
ATOM	2290	N	GLU	A	294	-9.845	8.465	13.774	1.00	26.28	N
ATOM	2291	CA	GLU	A	294	-11.252	8.203	13.506	1.00	27.28	C
ATOM	2292	C	GLU	A	294	-12.157	8.786	14.564	1.00	25.18	C
ATOM	2293	O	GLU	A	294	-12.655	8.059	15.407	1.00	25.83	O
ATOM	2294	CB	GLU	A	294	-11.509	6.688	13.403	1.00	29.38	C
ATOM	2295	CG	GLU	A	294	-11.930	6.202	12.013	1.00	27.11	C

ATOM	2296	CD	GLU	A	294	-12.826	7.200	11.307	1.00	28.00	C
ATOM	2297	OE1	GLU	A	294	-12.301	8.229	10.798	1.00	24.31	O
ATOM	2298	OE2	GLU	A	294	-14.056	6.961	11.289	1.00	26.88	O1-
ATOM	2299	N	ASN	A	295	-12.381	10.093	14.525	1.00	23.72	N
ATOM	2300	CA	ASN	A	295	-13.248	10.720	15.510	1.00	21.83	C
ATOM	2301	C	ASN	A	295	-14.523	9.893	15.424	1.00	18.95	C
ATOM	2302	O	ASN	A	295	-14.920	9.519	14.325	1.00	16.49	O
ATOM	2303	CB	ASN	A	295	-13.476	12.217	15.175	1.00	23.98	C
ATOM	2304	CG	ASN	A	295	-13.935	13.068	16.404	1.00	27.75	C
ATOM	2305	ND2	ASN	A	295	-13.404	12.768	17.605	1.00	26.54	N
ATOM	2306	OD1	ASN	A	295	-14.706	14.027	16.242	1.00	27.01	O
ATOM	2307	N	ASP	A	296	-14.757	9.198	16.536	1.00	19.63	N
ATOM	2308	CA	ASP	A	296	-15.900	8.306	16.708	1.00	18.42	C
ATOM	2309	C	ASP	A	296	-17.117	9.146	16.474	1.00	18.35	C
ATOM	2310	O	ASP	A	296	-17.158	10.280	16.940	1.00	19.40	O
ATOM	2311	CB	ASP	A	296	-16.006	7.790	18.155	1.00	17.52	C
ATOM	2312	CG	ASP	A	296	-14.676	7.708	18.867	1.00	16.66	C
ATOM	2313	OD1	ASP	A	296	-14.270	8.699	19.506	1.00	16.57	O
ATOM	2314	OD2	ASP	A	296	-14.096	6.609	18.887	1.00	17.73	O1-
ATOM	2315	N	GLU	A	297	-18.180	8.541	15.963	1.00	20.63	N
ATOM	2316	CA	GLU	A	297	-19.492	9.152	16.137	1.00	22.06	C
ATOM	2317	C	GLU	A	297	-20.176	8.612	17.385	1.00	20.95	C
ATOM	2318	O	GLU	A	297	-21.015	7.728	17.316	1.00	17.62	O
ATOM	2319	CB	GLU	A	297	-20.393	8.974	14.910	1.00	22.28	C
ATOM	2320	CG	GLU	A	297	-21.083	10.290	14.487	1.00	19.78	C
ATOM	2321	CD	GLU	A	297	-22.552	10.114	14.097	1.00	17.46	C
ATOM	2322	OE1	GLU	A	297	-23.107	9.029	14.331	1.00	18.89	O
ATOM	2323	OE2	GLU	A	297	-23.177	11.082	13.618	1.00	17.10	O1-
ATOM	2324	N	MET	A	298	-19.640	9.016	18.530	1.00	21.96	N
ATOM	2325	CA	MET	A	298	-20.458	9.312	19.694	1.00	23.40	C
ATOM	2326	C	MET	A	298	-21.712	10.057	19.184	1.00	25.29	C
ATOM	2327	O	MET	A	298	-21.650	10.760	18.154	1.00	23.28	O
ATOM	2328	CB	MET	A	298	-19.659	10.192	20.679	1.00	23.66	C
ATOM	2329	CG	MET	A	298	-19.890	11.713	20.580	1.00	23.57	C
ATOM	2330	SD	MET	A	298	-21.327	12.337	21.577	1.00	29.35	S
ATOM	2331	CE	MET	A	298	-20.736	14.067	22.065	1.00	21.21	C
ATOM	2332	N	PRO	A	299	-22.855	9.926	19.902	1.00	25.70	N
ATOM	2333	CA	PRO	A	299	-22.933	9.341	21.242	1.00	23.52	C
ATOM	2334	C	PRO	A	299	-23.444	7.894	21.195	1.00	22.57	C
ATOM	2335	O	PRO	A	299	-22.991	7.044	21.985	1.00	18.81	O
ATOM	2336	CB	PRO	A	299	-23.889	10.297	21.982	1.00	24.67	C
ATOM	2337	CG	PRO	A	299	-24.523	11.190	20.892	1.00	23.48	C
ATOM	2338	CD	PRO	A	299	-24.126	10.590	19.566	1.00	26.37	C
ATOM	2339	N	ALA	A	300	-24.449	7.663	20.336	1.00	23.45	N
ATOM	2340	CA	ALA	A	300	-24.730	6.330	19.769	1.00	24.55	C
ATOM	2341	C	ALA	A	300	-26.034	6.174	18.960	1.00	23.16	C
ATOM	2342	O	ALA	A	300	-26.739	7.152	18.691	1.00	21.49	O
ATOM	2343	CB	ALA	A	300	-24.655	5.248	20.867	1.00	26.49	C
ATOM	2344	N	ASP	A	301	-26.398	4.908	18.733	1.00	24.12	N
ATOM	2345	CA	ASP	A	301	-27.360	4.437	17.718	1.00	25.32	C
ATOM	2346	C	ASP	A	301	-28.711	5.075	17.818	1.00	26.66	C
ATOM	2347	O	ASP	A	301	-29.504	4.991	16.890	1.00	27.53	O
ATOM	2348	CB	ASP	A	301	-27.548	2.919	17.890	1.00	26.16	C
ATOM	2349	CG	ASP	A	301	-28.362	2.254	16.767	1.00	27.64	C
ATOM	2350	OD1	ASP	A	301	-28.582	2.850	15.681	1.00	27.63	O
ATOM	2351	OD2	ASP	A	301	-28.674	1.051	16.947	1.00	26.67	O1-
ATOM	2352	N	LEU	A	302	-28.958	5.727	18.946	1.00	30.35	N
ATOM	2353	CA	LEU	A	302	-30.086	5.351	19.792	1.00	31.56	C
ATOM	2354	C	LEU	A	302	-30.537	6.488	20.686	1.00	33.72	C
ATOM	2355	O	LEU	A	302	-29.798	7.474	20.867	1.00	34.95	O
ATOM	2356	CB	LEU	A	302	-29.647	4.182	20.653	1.00	28.92	C
ATOM	2357	CG	LEU	A	302	-28.155	4.371	20.967	1.00	31.25	C
ATOM	2358	CD1	LEU	A	302	-27.961	5.472	22.020	1.00	31.44	C
ATOM	2359	CD2	LEU	A	302	-27.489	3.041	21.378	1.00	32.08	C
ATOM	2360	N	PRO	A	303	-31.584	6.224	21.488	1.00	35.90	N
ATOM	2361	CA	PRO	A	303	-31.430	6.284	22.954	1.00	38.93	C
ATOM	2362	C	PRO	A	303	-30.874	4.971	23.513	1.00	38.86	C
ATOM	2363	O	PRO	A	303	-29.892	4.975	24.269	1.00	38.96	O
ATOM	2364	CB	PRO	A	303	-32.853	6.564	23.459	1.00	38.70	C
ATOM	2365	CG	PRO	A	303	-33.766	6.592	22.142	1.00	38.82	C
ATOM	2366	CD	PRO	A	303	-32.961	5.875	21.101	1.00	36.51	C

ATOM	2367	N	SER	A	304	-31.360	3.855	22.964	1.00	37.24	N
ATOM	2368	CA	SER	A	304	-31.097	2.522	23.528	1.00	35.92	C
ATOM	2369	C	SER	A	304	-31.120	2.445	25.034	1.00	32.14	C
ATOM	2370	O	SER	A	304	-30.681	1.441	25.597	1.00	30.33	O
ATOM	2371	CB	SER	A	304	-29.774	1.948	23.042	1.00	36.77	C
ATOM	2372	OG	SER	A	304	-30.029	0.971	22.042	1.00	42.09	O
ATOM	2373	N	LEU	A	305	-31.942	3.312	25.607	1.00	30.13	N
ATOM	2374	CA	LEU	A	305	-32.018	3.481	27.031	1.00	30.37	C
ATOM	2375	C	LEU	A	305	-30.913	2.663	27.730	1.00	31.82	C
ATOM	2376	O	LEU	A	305	-29.749	3.000	27.555	1.00	35.56	O
ATOM	2377	CB	LEU	A	305	-33.405	3.084	27.532	1.00	29.63	C
ATOM	2378	CG	LEU	A	305	-34.657	3.305	26.681	1.00	28.08	C
ATOM	2379	CD1	LEU	A	305	-35.835	3.366	27.647	1.00	28.23	C
ATOM	2380	CD2	LEU	A	305	-34.583	4.576	25.848	1.00	26.17	C
ATOM	2381	N	ALA	A	306	-31.218	1.418	28.097	1.00	28.81	N
ATOM	2382	CA	ALA	A	306	-30.480	0.759	29.160	1.00	25.85	C
ATOM	2383	C	ALA	A	306	-30.048	-0.635	28.744	1.00	24.00	C
ATOM	2384	O	ALA	A	306	-30.699	-1.241	27.912	1.00	23.85	O
ATOM	2385	CB	ALA	A	306	-31.353	0.688	30.406	1.00	28.20	C
ATOM	2386	N	ALA	A	307	-29.050	-1.198	29.422	1.00	22.64	N
ATOM	2387	CA	ALA	A	307	-28.519	-2.505	29.043	1.00	24.62	C
ATOM	2388	C	ALA	A	307	-28.896	-3.578	30.063	1.00	25.94	C
ATOM	2389	O	ALA	A	307	-28.053	-4.112	30.807	1.00	22.41	O
ATOM	2390	CB	ALA	A	307	-26.990	-2.432	28.860	1.00	26.11	C
ATOM	2391	N	ASP	A	308	-30.187	-3.895	30.092	1.00	28.91	N
ATOM	2392	CA	ASP	A	308	-30.732	-4.831	31.078	1.00	27.05	C
ATOM	2393	C	ASP	A	308	-31.350	-6.031	30.350	1.00	26.11	C
ATOM	2394	O	ASP	A	308	-32.535	-6.372	30.516	1.00	24.92	O
ATOM	2395	CB	ASP	A	308	-31.721	-4.099	32.001	1.00	25.32	C
ATOM	2396	CG	ASP	A	308	-31.006	-3.359	33.154	1.00	25.24	C
ATOM	2397	OD1	ASP	A	308	-29.958	-3.840	33.629	1.00	19.08	O
ATOM	2398	OD2	ASP	A	308	-31.452	-2.267	33.552	1.00	27.30	O1-
ATOM	2399	N	PHE	A	309	-30.575	-6.493	29.370	1.00	21.83	N
ATOM	2400	CA	PHE	A	309	-30.779	-7.762	28.711	1.00	18.30	C
ATOM	2401	C	PHE	A	309	-29.716	-8.657	29.238	1.00	15.33	C
ATOM	2402	O	PHE	A	309	-29.757	-9.841	29.018	1.00	18.02	O
ATOM	2403	CB	PHE	A	309	-30.554	-7.614	27.217	1.00	21.96	C
ATOM	2404	CG	PHE	A	309	-31.727	-8.017	26.378	1.00	22.43	C
ATOM	2405	CD1	PHE	A	309	-33.007	-8.013	26.902	1.00	21.17	C
ATOM	2406	CD2	PHE	A	309	-31.532	-8.450	25.084	1.00	21.60	C
ATOM	2407	CE1	PHE	A	309	-34.060	-8.440	26.163	1.00	22.58	C
ATOM	2408	CE2	PHE	A	309	-32.577	-8.876	24.337	1.00	24.09	C
ATOM	2409	CZ	PHE	A	309	-33.851	-8.876	24.874	1.00	26.92	C
ATOM	2410	N	VAL	A	310	-28.619	-8.040	29.631	1.00	17.52	N
ATOM	2411	CA	VAL	A	310	-27.491	-8.754	30.234	1.00	21.16	C
ATOM	2412	C	VAL	A	310	-27.676	-8.866	31.760	1.00	22.19	C
ATOM	2413	O	VAL	A	310	-26.735	-9.228	32.476	1.00	19.99	O
ATOM	2414	CB	VAL	A	310	-26.093	-8.031	29.910	1.00	22.76	C
ATOM	2415	CG1	VAL	A	310	-26.078	-7.481	28.455	1.00	16.58	C
ATOM	2416	CG2	VAL	A	310	-25.796	-6.903	30.929	1.00	19.12	C
ATOM	2417	N	GLU	A	311	-28.904	-8.615	32.231	1.00	24.86	N
ATOM	2418	CA	GLU	A	311	-29.132	-8.190	33.620	1.00	25.85	C
ATOM	2419	C	GLU	A	311	-30.462	-8.620	34.250	1.00	26.80	C
ATOM	2420	O	GLU	A	311	-30.617	-9.786	34.614	1.00	26.88	O
ATOM	2421	CB	GLU	A	311	-28.997	-6.672	33.724	1.00	24.55	C
ATOM	2422	CG	GLU	A	311	-28.150	-6.231	34.893	1.00	24.81	C
ATOM	2423	CD	GLU	A	311	-28.390	-7.071	36.097	1.00	22.49	C
ATOM	2424	OE1	GLU	A	311	-29.486	-6.952	36.659	1.00	27.72	O
ATOM	2425	OE2	GLU	A	311	-27.551	-7.932	36.415	1.00	21.47	O1-
ATOM	2426	N	SER	A	312	-31.340	-7.646	34.518	1.00	27.11	N
ATOM	2427	CA	SER	A	312	-32.668	-7.899	35.086	1.00	28.09	C
ATOM	2428	C	SER	A	312	-33.508	-8.811	34.212	1.00	29.00	C
ATOM	2429	O	SER	A	312	-34.603	-8.413	33.813	1.00	32.24	O
ATOM	2430	CB	SER	A	312	-33.463	-6.594	35.244	1.00	25.60	C
ATOM	2431	OG	SER	A	312	-32.912	-5.751	36.227	1.00	29.41	O
ATOM	2432	N	LYS	A	313	-33.071	-10.047	34.005	1.00	27.40	N
ATOM	2433	CA	LYS	A	313	-33.782	-10.965	33.129	1.00	27.14	C
ATOM	2434	C	LYS	A	313	-33.672	-12.368	33.711	1.00	30.75	C
ATOM	2435	O	LYS	A	313	-33.007	-12.566	34.740	1.00	31.32	O
ATOM	2436	CB	LYS	A	313	-33.153	-10.936	31.738	1.00	21.94	C
ATOM	2437	CG	LYS	A	313	-33.859	-11.786	30.716	1.00	17.30	C

ATOM	2438	CD	LYS	A	313	-34.578	-10.916	29.723	1.00	15.90	C
ATOM	2439	CE	LYS	A	313	-34.503	-11.512	28.346	1.00	12.19	C
ATOM	2440	NZ	LYS	A	313	-33.124	-11.478	27.875	1.00	14.13	N1+
ATOM	2441	N	ASP	A	314	-34.367	-13.332	33.102	1.00	33.04	N
ATOM	2442	CA	ASP	A	314	-33.947	-14.726	33.210	1.00	34.53	C
ATOM	2443	C	ASP	A	314	-33.696	-15.303	31.820	1.00	34.78	C
ATOM	2444	O	ASP	A	314	-34.638	-15.649	31.091	1.00	34.31	O
ATOM	2445	CB	ASP	A	314	-34.962	-15.587	33.974	1.00	34.53	C
ATOM	2446	CG	ASP	A	314	-34.538	-17.065	34.066	1.00	36.92	C
ATOM	2447	OD1	ASP	A	314	-33.379	-17.438	33.692	1.00	33.31	O
ATOM	2448	OD2	ASP	A	314	-35.415	-17.878	34.458	1.00	41.34	O1-
ATOM	2449	N	VAL	A	315	-32.463	-15.055	31.384	1.00	33.55	N
ATOM	2450	CA	VAL	A	315	-31.752	-15.855	30.402	1.00	30.37	C
ATOM	2451	C	VAL	A	315	-30.272	-15.815	30.829	1.00	28.87	C
ATOM	2452	O	VAL	A	315	-29.493	-14.952	30.414	1.00	25.57	O
ATOM	2453	CB	VAL	A	315	-31.929	-15.287	28.979	1.00	32.83	C
ATOM	2454	CG1	VAL	A	315	-33.417	-15.436	28.512	1.00	29.71	C
ATOM	2455	CG2	VAL	A	315	-31.453	-13.820	28.934	1.00	33.25	C
ATOM	2456	N	CYS	A	316	-30.032	-16.517	31.931	1.00	29.88	N
ATOM	2457	CA	CYS	A	316	-28.683	-16.794	32.423	1.00	27.73	C
ATOM	2458	C	CYS	A	316	-27.953	-17.584	31.361	1.00	26.33	C
ATOM	2459	O	CYS	A	316	-27.153	-17.013	30.620	1.00	26.76	O
ATOM	2460	CB	CYS	A	316	-28.734	-17.628	33.688	1.00	27.85	C
ATOM	2461	SG	CYS	A	316	-27.077	-18.069	34.276	1.00	31.37	S
ATOM	2462	N	LYS	A	317	-28.313	-18.863	31.217	1.00	22.54	N
ATOM	2463	CA	LYS	A	317	-27.900	-19.631	30.046	1.00	21.29	C
ATOM	2464	C	LYS	A	317	-28.905	-19.504	28.912	1.00	22.46	C
ATOM	2465	O	LYS	A	317	-28.510	-19.220	27.790	1.00	22.63	O
ATOM	2466	CB	LYS	A	317	-27.693	-21.120	30.369	1.00	18.85	C
ATOM	2467	CG	LYS	A	317	-26.247	-21.541	30.640	1.00	18.02	C
ATOM	2468	CD	LYS	A	317	-26.179	-22.731	31.604	1.00	20.06	C
ATOM	2469	CE	LYS	A	317	-24.770	-22.943	32.219	1.00	22.33	C
ATOM	2470	NZ	LYS	A	317	-24.375	-24.401	32.437	1.00	22.00	N1+
ATOM	2471	N	ASN	A	318	-30.201	-19.646	29.199	1.00	22.97	N
ATOM	2472	CA	ASN	A	318	-31.215	-19.864	28.143	1.00	22.32	C
ATOM	2473	C	ASN	A	318	-30.963	-19.181	26.798	1.00	24.26	C
ATOM	2474	O	ASN	A	318	-31.447	-19.657	25.759	1.00	26.24	O
ATOM	2475	CB	ASN	A	318	-32.607	-19.439	28.601	1.00	19.64	C
ATOM	2476	CG	ASN	A	318	-33.659	-19.693	27.542	1.00	17.20	C
ATOM	2477	ND2	ASN	A	318	-33.852	-18.753	26.630	1.00	17.37	N
ATOM	2478	OD1	ASN	A	318	-34.234	-20.753	27.507	1.00	19.89	O
ATOM	2479	N	TYR	A	319	-30.390	-17.978	26.856	1.00	23.97	N
ATOM	2480	CA	TYR	A	319	-30.222	-17.095	25.694	1.00	24.24	C
ATOM	2481	C	TYR	A	319	-28.722	-16.854	25.621	1.00	23.49	C
ATOM	2482	O	TYR	A	319	-28.250	-15.857	25.088	1.00	22.66	O
ATOM	2483	CB	TYR	A	319	-31.022	-15.804	25.948	1.00	23.01	C
ATOM	2484	CG	TYR	A	319	-30.749	-14.587	25.094	1.00	22.30	C
ATOM	2485	CD1	TYR	A	319	-31.440	-14.393	23.908	1.00	24.18	C
ATOM	2486	CD2	TYR	A	319	-30.040	-13.502	25.616	1.00	20.42	C
ATOM	2487	CE1	TYR	A	319	-31.453	-13.148	23.278	1.00	23.68	C
ATOM	2488	CE2	TYR	A	319	-30.044	-12.265	24.993	1.00	17.71	C
ATOM	2489	CZ	TYR	A	319	-30.751	-12.097	23.826	1.00	20.42	C
ATOM	2490	OH	TYR	A	319	-30.732	-10.898	23.159	1.00	22.03	O
ATOM	2491	N	ALA	A	320	-27.993	-17.889	25.995	1.00	21.15	N
ATOM	2492	CA	ALA	A	320	-26.572	-17.798	26.227	1.00	23.56	C
ATOM	2493	C	ALA	A	320	-26.032	-19.198	26.089	1.00	25.78	C
ATOM	2494	O	ALA	A	320	-25.428	-19.751	27.004	1.00	25.36	O
ATOM	2495	CB	ALA	A	320	-26.290	-17.267	27.618	1.00	24.04	C
ATOM	2496	N	GLU	A	321	-26.398	-19.828	24.985	1.00	28.84	N
ATOM	2497	CA	GLU	A	321	-25.690	-21.008	24.536	1.00	27.99	C
ATOM	2498	C	GLU	A	321	-24.907	-20.746	23.257	1.00	25.24	C
ATOM	2499	O	GLU	A	321	-24.235	-21.634	22.715	1.00	27.19	O
ATOM	2500	CB	GLU	A	321	-26.658	-22.167	24.388	1.00	30.20	C
ATOM	2501	CG	GLU	A	321	-26.266	-23.326	25.298	1.00	37.63	C
ATOM	2502	CD	GLU	A	321	-25.831	-22.921	26.736	1.00	38.24	C
ATOM	2503	OE1	GLU	A	321	-24.725	-22.329	26.915	1.00	36.30	O
ATOM	2504	OE2	GLU	A	321	-26.509	-23.388	27.699	1.00	40.13	O1-
ATOM	2505	N	ALA	A	322	-24.889	-19.483	22.857	1.00	20.08	N
ATOM	2506	CA	ALA	A	322	-23.864	-19.005	21.965	1.00	17.91	C
ATOM	2507	C	ALA	A	322	-22.817	-18.388	22.879	1.00	16.32	C
ATOM	2508	O	ALA	A	322	-23.051	-17.332	23.441	1.00	17.37	O

ATOM	2509	CB	ALA	A	322	-24.437	-17.962	21.032	1.00	16.29	C
ATOM	2510	N	LYS	A	323	-21.746	-19.116	23.166	1.00	13.15	N
ATOM	2511	CA	LYS	A	323	-20.707	-18.569	24.019	1.00	13.43	C
ATOM	2512	C	LYS	A	323	-20.251	-17.244	23.408	1.00	15.07	C
ATOM	2513	O	LYS	A	323	-20.751	-16.180	23.773	1.00	14.91	O
ATOM	2514	CB	LYS	A	323	-19.537	-19.560	24.124	1.00	14.15	C
ATOM	2515	CG	LYS	A	323	-18.201	-18.956	24.571	1.00	15.59	C
ATOM	2516	CD	LYS	A	323	-17.235	-20.027	25.079	1.00	14.64	C
ATOM	2517	CE	LYS	A	323	-15.850	-19.935	24.450	1.00	14.18	C
ATOM	2518	NZ	LYS	A	323	-15.145	-18.696	24.813	1.00	15.36	N1+
ATOM	2519	N	ASP	A	324	-19.608	-17.372	22.252	1.00	17.96	N
ATOM	2520	CA	ASP	A	324	-18.847	-16.299	21.623	1.00	15.80	C
ATOM	2521	C	ASP	A	324	-19.718	-15.035	21.411	1.00	17.56	C
ATOM	2522	O	ASP	A	324	-19.304	-13.924	21.781	1.00	17.35	O
ATOM	2523	CB	ASP	A	324	-18.233	-16.790	20.275	1.00	15.91	C
ATOM	2524	CG	ASP	A	324	-17.787	-18.293	20.293	1.00	16.85	C
ATOM	2525	OD1	ASP	A	324	-16.749	-18.623	20.903	1.00	15.85	O
ATOM	2526	OD2	ASP	A	324	-18.420	-19.140	19.617	1.00	17.67	O1-
ATOM	2527	N	VAL	A	325	-20.930	-15.180	20.870	1.00	15.39	N
ATOM	2528	CA	VAL	A	325	-21.660	-13.979	20.467	1.00	18.29	C
ATOM	2529	C	VAL	A	325	-22.388	-13.305	21.613	1.00	20.30	C
ATOM	2530	O	VAL	A	325	-22.751	-12.137	21.509	1.00	20.95	O
ATOM	2531	CB	VAL	A	325	-22.693	-14.215	19.333	1.00	18.19	C
ATOM	2532	CG1	VAL	A	325	-22.039	-14.874	18.125	1.00	17.25	C
ATOM	2533	CG2	VAL	A	325	-23.875	-15.003	19.849	1.00	19.92	C
ATOM	2534	N	PHE	A	326	-22.608	-14.039	22.701	1.00	23.24	N
ATOM	2535	CA	PHE	A	326	-23.259	-13.497	23.893	1.00	22.88	C
ATOM	2536	C	PHE	A	326	-22.336	-12.431	24.476	1.00	23.49	C
ATOM	2537	O	PHE	A	326	-22.675	-11.242	24.548	1.00	20.07	O
ATOM	2538	CB	PHE	A	326	-23.474	-14.624	24.911	1.00	23.89	C
ATOM	2539	CG	PHE	A	326	-24.307	-14.229	26.092	1.00	25.04	C
ATOM	2540	CD1	PHE	A	326	-25.603	-13.781	25.923	1.00	25.47	C
ATOM	2541	CD2	PHE	A	326	-23.776	-14.256	27.367	1.00	24.57	C
ATOM	2542	CE1	PHE	A	326	-26.356	-13.354	27.016	1.00	26.31	C
ATOM	2543	CE2	PHE	A	326	-24.522	-13.830	28.453	1.00	25.69	C
ATOM	2544	CZ	PHE	A	326	-25.814	-13.375	28.277	1.00	24.50	C
ATOM	2545	N	LEU	A	327	-21.109	-12.854	24.753	1.00	24.46	N
ATOM	2546	CA	LEU	A	327	-20.056	-11.948	25.200	1.00	25.44	C
ATOM	2547	C	LEU	A	327	-19.866	-10.805	24.193	1.00	23.62	C
ATOM	2548	O	LEU	A	327	-19.782	-9.623	24.568	1.00	18.87	O
ATOM	2549	CB	LEU	A	327	-18.744	-12.727	25.357	1.00	25.68	C
ATOM	2550	CG	LEU	A	327	-18.569	-13.566	26.624	1.00	22.99	C
ATOM	2551	CD1	LEU	A	327	-18.534	-12.630	27.851	1.00	21.08	C
ATOM	2552	CD2	LEU	A	327	-19.688	-14.578	26.719	1.00	21.68	C
ATOM	2553	N	GLY	A	328	-19.861	-11.175	22.911	1.00	22.86	N
ATOM	2554	CA	GLY	A	328	-19.715	-10.197	21.850	1.00	19.96	C
ATOM	2555	C	GLY	A	328	-20.775	-9.121	21.937	1.00	18.31	C
ATOM	2556	O	GLY	A	328	-20.496	-7.961	21.651	1.00	14.99	O
ATOM	2557	N	MET	A	329	-21.988	-9.503	22.332	1.00	18.03	N
ATOM	2558	CA	MET	A	329	-23.095	-8.563	22.406	1.00	16.11	C
ATOM	2559	C	MET	A	329	-23.171	-7.903	23.772	1.00	16.92	C
ATOM	2560	O	MET	A	329	-23.768	-6.838	23.930	1.00	12.56	O
ATOM	2561	CB	MET	A	329	-24.412	-9.253	22.090	1.00	15.19	C
ATOM	2562	CG	MET	A	329	-25.567	-8.288	22.048	1.00	16.53	C
ATOM	2563	SD	MET	A	329	-26.910	-8.847	21.026	1.00	19.89	S
ATOM	2564	CE	MET	A	329	-27.585	-7.279	20.531	1.00	17.00	C
ATOM	2565	N	PHE	A	330	-22.516	-8.495	24.761	1.00	18.68	N
ATOM	2566	CA	PHE	A	330	-22.249	-7.713	25.953	1.00	20.67	C
ATOM	2567	C	PHE	A	330	-21.302	-6.630	25.467	1.00	20.74	C
ATOM	2568	O	PHE	A	330	-21.793	-5.643	24.911	1.00	18.89	O
ATOM	2569	CB	PHE	A	330	-21.628	-8.544	27.091	1.00	19.97	C
ATOM	2570	CG	PHE	A	330	-21.607	-7.824	28.417	1.00	17.23	C
ATOM	2571	CD1	PHE	A	330	-22.552	-6.854	28.710	1.00	16.05	C
ATOM	2572	CD2	PHE	A	330	-20.594	-8.041	29.323	1.00	16.93	C
ATOM	2573	CE1	PHE	A	330	-22.478	-6.118	29.854	1.00	13.30	C
ATOM	2574	CE2	PHE	A	330	-20.523	-7.294	30.483	1.00	15.90	C
ATOM	2575	CZ	PHE	A	330	-21.464	-6.336	30.738	1.00	14.36	C
ATOM	2576	N	LEU	A	331	-20.019	-7.003	25.336	1.00	21.76	N
ATOM	2577	CA	LEU	A	331	-18.930	-6.124	24.885	1.00	22.65	C
ATOM	2578	C	LEU	A	331	-19.431	-4.988	24.012	1.00	26.84	C
ATOM	2579	O	LEU	A	331	-19.549	-3.859	24.503	1.00	30.55	O

ATOM	2580	CB	LEU	A	331	-17.900	-6.919	24.093	1.00	21.01	C
ATOM	2581	CG	LEU	A	331	-16.415	-6.566	24.178	1.00	21.98	C
ATOM	2582	CD1	LEU	A	331	-16.125	-5.467	25.205	1.00	18.67	C
ATOM	2583	CD2	LEU	A	331	-15.674	-7.848	24.537	1.00	19.61	C
ATOM	2584	N	TYR	A	332	-19.930	-5.338	22.816	1.00	27.17	N
ATOM	2585	CA	TYR	A	332	-20.406	-4.377	21.794	1.00	24.12	C
ATOM	2586	C	TYR	A	332	-21.396	-3.374	22.322	1.00	22.23	C
ATOM	2587	O	TYR	A	332	-21.229	-2.187	22.105	1.00	22.76	O
ATOM	2588	CB	TYR	A	332	-21.021	-5.134	20.599	1.00	22.53	C
ATOM	2589	CG	TYR	A	332	-22.199	-4.494	19.884	1.00	16.65	C
ATOM	2590	CD1	TYR	A	332	-22.123	-3.225	19.365	1.00	17.03	C
ATOM	2591	CD2	TYR	A	332	-23.319	-5.242	19.579	1.00	15.91	C
ATOM	2592	CE1	TYR	A	332	-23.132	-2.727	18.564	1.00	15.87	C
ATOM	2593	CE2	TYR	A	332	-24.309	-4.760	18.779	1.00	12.78	C
ATOM	2594	CZ	TYR	A	332	-24.219	-3.503	18.270	1.00	12.74	C
ATOM	2595	OH	TYR	A	332	-25.211	-3.032	17.443	1.00	11.75	O
ATOM	2596	N	GLU	A	333	-22.462	-3.858	22.947	1.00	21.11	N
ATOM	2597	CA	GLU	A	333	-23.480	-2.982	23.516	1.00	19.69	C
ATOM	2598	C	GLU	A	333	-22.973	-2.225	24.753	1.00	19.94	C
ATOM	2599	O	GLU	A	333	-23.239	-1.039	24.920	1.00	21.44	O
ATOM	2600	CB	GLU	A	333	-24.722	-3.791	23.854	1.00	17.19	C
ATOM	2601	CG	GLU	A	333	-25.676	-3.903	22.700	1.00	13.27	C
ATOM	2602	CD	GLU	A	333	-26.462	-2.640	22.499	1.00	16.80	C
ATOM	2603	OE1	GLU	A	333	-26.673	-1.903	23.474	1.00	17.89	O
ATOM	2604	OE2	GLU	A	333	-26.870	-2.358	21.358	1.00	21.21	O1-
ATOM	2605	N	TYR	A	334	-22.108	-2.846	25.535	1.00	17.50	N
ATOM	2606	CA	TYR	A	334	-21.473	-2.102	26.591	1.00	16.87	C
ATOM	2607	C	TYR	A	334	-20.552	-1.074	25.929	1.00	17.20	C
ATOM	2608	O	TYR	A	334	-20.643	0.126	26.220	1.00	15.06	O
ATOM	2609	CB	TYR	A	334	-20.694	-3.049	27.511	1.00	19.62	C
ATOM	2610	CG	TYR	A	334	-20.693	-2.600	28.969	1.00	21.56	C
ATOM	2611	CD1	TYR	A	334	-20.828	-1.258	29.304	1.00	23.27	C
ATOM	2612	CD2	TYR	A	334	-20.546	-3.503	29.994	1.00	19.88	C
ATOM	2613	CE1	TYR	A	334	-20.808	-0.840	30.609	1.00	21.45	C
ATOM	2614	CE2	TYR	A	334	-20.523	-3.084	31.297	1.00	21.56	C
ATOM	2615	CZ	TYR	A	334	-20.643	-1.750	31.594	1.00	21.82	C
ATOM	2616	OH	TYR	A	334	-20.475	-1.288	32.873	1.00	24.16	O
ATOM	2617	N	ALA	A	335	-19.934	-1.510	24.833	1.00	16.03	N
ATOM	2618	CA	ALA	A	335	-18.944	-0.733	24.108	1.00	15.10	C
ATOM	2619	C	ALA	A	335	-19.581	0.539	23.577	1.00	16.13	C
ATOM	2620	O	ALA	A	335	-19.116	1.638	23.861	1.00	17.41	O
ATOM	2621	CB	ALA	A	335	-18.392	-1.555	22.966	1.00	13.10	C
ATOM	2622	N	ARG	A	336	-20.753	0.374	22.974	1.00	16.93	N
ATOM	2623	CA	ARG	A	336	-21.547	1.458	22.418	1.00	16.89	C
ATOM	2624	C	ARG	A	336	-21.658	2.712	23.290	1.00	18.08	C
ATOM	2625	O	ARG	A	336	-21.482	3.820	22.803	1.00	16.00	O
ATOM	2626	CB	ARG	A	336	-22.946	0.940	22.127	1.00	17.05	C
ATOM	2627	CG	ARG	A	336	-23.108	0.324	20.776	1.00	16.01	C
ATOM	2628	CD	ARG	A	336	-24.129	1.117	19.996	1.00	18.77	C
ATOM	2629	NE	ARG	A	336	-25.334	0.350	19.735	1.00	23.35	N
ATOM	2630	CZ	ARG	A	336	-25.554	-0.337	18.613	1.00	26.57	C
ATOM	2631	NH1	ARG	A	336	-24.595	-0.458	17.700	1.00	24.51	N1+
ATOM	2632	NH2	ARG	A	336	-26.743	-0.891	18.390	1.00	27.93	N
ATOM	2633	N	ARG	A	337	-22.052	2.543	24.548	1.00	21.47	N
ATOM	2634	CA	ARG	A	337	-22.449	3.689	25.383	1.00	24.30	C
ATOM	2635	C	ARG	A	337	-21.309	4.239	26.248	1.00	23.58	C
ATOM	2636	O	ARG	A	337	-21.539	4.923	27.280	1.00	21.32	O
ATOM	2637	CB	ARG	A	337	-23.657	3.342	26.285	1.00	27.68	C
ATOM	2638	CG	ARG	A	337	-24.089	1.856	26.376	1.00	29.06	C
ATOM	2639	CD	ARG	A	337	-25.460	1.731	27.076	1.00	29.77	C
ATOM	2640	NE	ARG	A	337	-26.418	0.886	26.353	1.00	28.59	N
ATOM	2641	CZ	ARG	A	337	-26.845	1.102	25.108	1.00	28.23	C
ATOM	2642	NH1	ARG	A	337	-26.324	2.083	24.382	1.00	27.06	N1+
ATOM	2643	NH2	ARG	A	337	-27.795	0.324	24.582	1.00	24.49	N
ATOM	2644	N	HIS	A	338	-20.082	3.889	25.864	1.00	21.05	N
ATOM	2645	CA	HIS	A	338	-18.922	4.164	26.703	1.00	18.37	C
ATOM	2646	C	HIS	A	338	-17.702	4.574	25.901	1.00	13.99	C
ATOM	2647	O	HIS	A	338	-16.611	4.073	26.118	1.00	11.40	O
ATOM	2648	CB	HIS	A	338	-18.610	2.954	27.576	1.00	19.06	C
ATOM	2649	CG	HIS	A	338	-19.551	2.791	28.728	1.00	21.75	C
ATOM	2650	CD2	HIS	A	338	-19.937	1.685	29.406	1.00	21.31	C

ATOM	2651	ND1	HIS	A	338	-20.238	3.847	29.288	1.00	22.04	N
ATOM	2652	CE1	HIS	A	338	-21.007	3.394	30.267	1.00	25.17	C
ATOM	2653	NE2	HIS	A	338	-20.844	2.087	30.358	1.00	21.03	N
ATOM	2654	N	PRO	A	339	-17.826	5.673	25.169	1.00	10.97	N
ATOM	2655	CA	PRO	A	339	-16.623	6.285	24.652	1.00	12.13	C
ATOM	2656	C	PRO	A	339	-15.808	6.864	25.780	1.00	14.82	C
ATOM	2657	O	PRO	A	339	-14.743	7.430	25.543	1.00	16.89	O
ATOM	2658	CB	PRO	A	339	-17.148	7.379	23.719	1.00	12.95	C
ATOM	2659	CG	PRO	A	339	-18.636	7.237	23.705	1.00	11.47	C
ATOM	2660	CD	PRO	A	339	-18.985	6.546	24.970	1.00	12.68	C
ATOM	2661	N	ASP	A	340	-16.335	6.799	26.998	1.00	16.39	N
ATOM	2662	CA	ASP	A	340	-15.676	7.456	28.120	1.00	17.93	C
ATOM	2663	C	ASP	A	340	-14.888	6.494	29.012	1.00	16.22	C
ATOM	2664	O	ASP	A	340	-14.163	6.926	29.905	1.00	13.33	O
ATOM	2665	CB	ASP	A	340	-16.689	8.324	28.916	1.00	23.67	C
ATOM	2666	CG	ASP	A	340	-17.750	7.512	29.671	1.00	28.01	C
ATOM	2667	OD1	ASP	A	340	-18.805	7.174	29.077	1.00	27.93	O
ATOM	2668	OD2	ASP	A	340	-17.630	7.403	30.917	1.00	31.19	O1-
ATOM	2669	N	TYR	A	341	-14.848	5.230	28.586	1.00	16.78	N
ATOM	2670	CA	TYR	A	341	-14.063	4.179	29.225	1.00	16.62	C
ATOM	2671	C	TYR	A	341	-13.182	3.548	28.151	1.00	18.04	C
ATOM	2672	O	TYR	A	341	-13.662	3.157	27.095	1.00	19.19	O
ATOM	2673	CB	TYR	A	341	-14.956	3.059	29.782	1.00	17.89	C
ATOM	2674	CG	TYR	A	341	-15.863	3.378	30.973	1.00	17.57	C
ATOM	2675	CD1	TYR	A	341	-15.606	4.437	31.821	1.00	16.92	C
ATOM	2676	CD2	TYR	A	341	-16.915	2.536	31.290	1.00	15.97	C
ATOM	2677	CE1	TYR	A	341	-16.361	4.638	32.959	1.00	20.41	C
ATOM	2678	CE2	TYR	A	341	-17.666	2.723	32.406	1.00	18.32	C
ATOM	2679	CZ	TYR	A	341	-17.393	3.772	33.260	1.00	20.96	C
ATOM	2680	OH	TYR	A	341	-18.120	3.905	34.452	1.00	18.90	O
ATOM	2681	N	SER	A	342	-11.972	3.194	28.546	1.00	19.93	N
ATOM	2682	CA	SER	A	342	-10.979	2.592	27.668	1.00	17.81	C
ATOM	2683	C	SER	A	342	-11.334	1.153	27.386	1.00	17.13	C
ATOM	2684	O	SER	A	342	-11.554	0.401	28.331	1.00	17.80	O
ATOM	2685	CB	SER	A	342	-9.643	2.595	28.389	1.00	19.87	C
ATOM	2686	OG	SER	A	342	-9.820	2.057	29.693	1.00	17.44	O
ATOM	2687	N	VAL	A	343	-11.037	0.712	26.168	1.00	16.67	N
ATOM	2688	CA	VAL	A	343	-11.195	-0.679	25.788	1.00	15.06	C
ATOM	2689	C	VAL	A	343	-10.570	-1.594	26.815	1.00	15.29	C
ATOM	2690	O	VAL	A	343	-11.284	-2.267	27.538	1.00	17.32	O
ATOM	2691	CB	VAL	A	343	-10.601	-0.964	24.386	1.00	17.69	C
ATOM	2692	CG1	VAL	A	343	-9.194	-0.425	24.270	1.00	17.11	C
ATOM	2693	CG2	VAL	A	343	-10.638	-2.460	24.091	1.00	19.44	C
ATOM	2694	N	VAL	A	344	-9.273	-1.446	27.044	1.00	14.96	N
ATOM	2695	CA	VAL	A	344	-8.571	-2.281	28.013	1.00	12.81	C
ATOM	2696	C	VAL	A	344	-9.315	-2.430	29.334	1.00	14.93	C
ATOM	2697	O	VAL	A	344	-9.358	-3.522	29.872	1.00	16.62	O
ATOM	2698	CB	VAL	A	344	-7.169	-1.751	28.262	1.00	9.56	C
ATOM	2699	CG1	VAL	A	344	-6.537	-2.427	29.439	1.00	11.59	C
ATOM	2700	CG2	VAL	A	344	-6.344	-1.992	27.048	1.00	15.07	C
ATOM	2701	N	LEU	A	345	-10.048	-1.400	29.763	1.00	16.26	N
ATOM	2702	CA	LEU	A	345	-10.925	-1.526	30.942	1.00	17.05	C
ATOM	2703	C	LEU	A	345	-12.105	-2.415	30.592	1.00	15.69	C
ATOM	2704	O	LEU	A	345	-12.294	-3.481	31.172	1.00	14.48	O
ATOM	2705	CB	LEU	A	345	-11.459	-0.159	31.392	1.00	18.45	C
ATOM	2706	CG	LEU	A	345	-11.962	0.060	32.830	1.00	18.68	C
ATOM	2707	CD1	LEU	A	345	-13.262	-0.629	33.058	1.00	17.13	C
ATOM	2708	CD2	LEU	A	345	-10.926	-0.419	33.841	1.00	21.35	C
ATOM	2709	N	LEU	A	346	-12.855	-1.992	29.588	1.00	14.21	N
ATOM	2710	CA	LEU	A	346	-14.109	-2.633	29.226	1.00	14.41	C
ATOM	2711	C	LEU	A	346	-13.900	-4.106	28.967	1.00	15.55	C
ATOM	2712	O	LEU	A	346	-14.832	-4.889	29.076	1.00	16.56	O
ATOM	2713	CB	LEU	A	346	-14.688	-1.981	27.970	1.00	14.22	C
ATOM	2714	CG	LEU	A	346	-16.004	-1.213	27.991	1.00	11.29	C
ATOM	2715	CD1	LEU	A	346	-16.066	-0.240	29.135	1.00	13.74	C
ATOM	2716	CD2	LEU	A	346	-16.105	-0.487	26.692	1.00	11.30	C
ATOM	2717	N	LEU	A	347	-12.680	-4.472	28.591	1.00	17.67	N
ATOM	2718	CA	LEU	A	347	-12.325	-5.868	28.316	1.00	18.46	C
ATOM	2719	C	LEU	A	347	-12.252	-6.655	29.618	1.00	18.38	C
ATOM	2720	O	LEU	A	347	-12.542	-7.844	29.626	1.00	18.38	O
ATOM	2721	CB	LEU	A	347	-10.977	-5.941	27.598	1.00	18.93	C

ATOM	2722	CG	LEU	A	347	-10.687	-7.030	26.566	1.00	18.83	C
ATOM	2723	CD1	LEU	A	347	-11.567	-8.246	26.778	1.00	17.43	C
ATOM	2724	CD2	LEU	A	347	-10.883	-6.449	25.188	1.00	17.31	C
ATOM	2725	N	ARG	A	348	-11.908	-5.966	30.710	1.00	18.37	N
ATOM	2726	CA	ARG	A	348	-12.082	-6.454	32.088	1.00	19.23	C
ATOM	2727	C	ARG	A	348	-13.543	-6.617	32.563	1.00	19.03	C
ATOM	2728	O	ARG	A	348	-13.821	-7.463	33.423	1.00	21.17	O
ATOM	2729	CB	ARG	A	348	-11.365	-5.526	33.060	1.00	17.92	C
ATOM	2730	CG	ARG	A	348	-9.954	-5.943	33.395	1.00	21.29	C
ATOM	2731	CD	ARG	A	348	-9.199	-4.790	34.054	1.00	22.78	C
ATOM	2732	NE	ARG	A	348	-7.997	-5.281	34.717	1.00	25.21	N
ATOM	2733	CZ	ARG	A	348	-7.661	-5.008	35.977	1.00	26.74	C
ATOM	2734	NH1	ARG	A	348	-8.245	-4.007	36.636	1.00	24.24	N1+
ATOM	2735	NH2	ARG	A	348	-6.631	-5.644	36.530	1.00	25.87	N
ATOM	2736	N	LEU	A	349	-14.437	-5.728	32.119	1.00	15.77	N
ATOM	2737	CA	LEU	A	349	-15.868	-5.894	32.346	1.00	11.96	C
ATOM	2738	C	LEU	A	349	-16.417	-7.004	31.453	1.00	14.75	C
ATOM	2739	O	LEU	A	349	-17.446	-7.619	31.748	1.00	16.02	O
ATOM	2740	CB	LEU	A	349	-16.599	-4.603	32.054	1.00	6.86	C
ATOM	2741	CG	LEU	A	349	-16.030	-3.328	32.671	1.00	12.17	C
ATOM	2742	CD1	LEU	A	349	-17.117	-2.246	32.667	1.00	14.15	C
ATOM	2743	CD2	LEU	A	349	-15.553	-3.568	34.090	1.00	10.52	C
ATOM	2744	N	ALA	A	350	-15.667	-7.344	30.416	1.00	15.21	N
ATOM	2745	CA	ALA	A	350	-16.061	-8.424	29.539	1.00	16.39	C
ATOM	2746	C	ALA	A	350	-15.410	-9.730	29.963	1.00	17.56	C
ATOM	2747	O	ALA	A	350	-15.616	-10.767	29.332	1.00	17.63	O
ATOM	2748	CB	ALA	A	350	-15.695	-8.084	28.116	1.00	17.35	C
ATOM	2749	N	LYS	A	351	-14.654	-9.688	31.057	1.00	19.16	N
ATOM	2750	CA	LYS	A	351	-14.267	-10.913	31.747	1.00	20.56	C
ATOM	2751	C	LYS	A	351	-14.763	-11.048	33.166	1.00	20.35	C
ATOM	2752	O	LYS	A	351	-14.523	-12.083	33.770	1.00	20.19	O
ATOM	2753	CB	LYS	A	351	-12.756	-11.122	31.726	1.00	23.48	C
ATOM	2754	CG	LYS	A	351	-12.300	-12.152	30.682	1.00	29.67	C
ATOM	2755	CD	LYS	A	351	-12.868	-11.815	29.274	1.00	33.17	C
ATOM	2756	CE	LYS	A	351	-11.936	-12.235	28.116	1.00	33.44	C
ATOM	2757	NZ	LYS	A	351	-12.007	-11.236	26.983	1.00	31.75	N1+
ATOM	2758	N	THR	A	352	-15.548	-10.079	33.651	1.00	22.45	N
ATOM	2759	CA	THR	A	352	-16.326	-10.254	34.892	1.00	25.02	C
ATOM	2760	C	THR	A	352	-17.850	-10.434	34.671	1.00	27.15	C
ATOM	2761	O	THR	A	352	-18.596	-10.768	35.590	1.00	28.15	O
ATOM	2762	CB	THR	A	352	-16.105	-9.093	35.854	1.00	25.24	C
ATOM	2763	CG2	THR	A	352	-16.302	-9.557	37.305	1.00	25.36	C
ATOM	2764	OG1	THR	A	352	-14.772	-8.583	35.690	1.00	27.53	O
ATOM	2765	N	TYR	A	353	-18.314	-10.227	33.443	1.00	28.56	N
ATOM	2766	CA	TYR	A	353	-19.436	-11.009	32.951	1.00	27.35	C
ATOM	2767	C	TYR	A	353	-18.988	-12.487	32.781	1.00	28.05	C
ATOM	2768	O	TYR	A	353	-19.141	-13.277	33.718	1.00	29.94	O
ATOM	2769	CB	TYR	A	353	-19.942	-10.427	31.629	1.00	25.44	C
ATOM	2770	CG	TYR	A	353	-21.447	-10.511	31.448	1.00	24.45	C
ATOM	2771	CD1	TYR	A	353	-22.327	-10.076	32.455	1.00	21.15	C
ATOM	2772	CD2	TYR	A	353	-21.991	-11.122	30.316	1.00	22.41	C
ATOM	2773	CE1	TYR	A	353	-23.705	-10.270	32.338	1.00	18.94	C
ATOM	2774	CE2	TYR	A	353	-23.364	-11.318	30.195	1.00	19.82	C
ATOM	2775	CZ	TYR	A	353	-24.208	-10.906	31.206	1.00	19.86	C
ATOM	2776	OH	TYR	A	353	-25.525	-11.262	31.124	1.00	18.86	O
ATOM	2777	N	GLU	A	354	-18.244	-12.794	31.714	1.00	25.58	N
ATOM	2778	CA	GLU	A	354	-17.941	-14.192	31.332	1.00	24.34	C
ATOM	2779	C	GLU	A	354	-17.618	-15.178	32.445	1.00	23.15	C
ATOM	2780	O	GLU	A	354	-17.902	-16.361	32.315	1.00	21.79	O
ATOM	2781	CB	GLU	A	354	-16.774	-14.261	30.346	1.00	25.14	C
ATOM	2782	CG	GLU	A	354	-16.485	-15.694	29.867	1.00	24.30	C
ATOM	2783	CD	GLU	A	354	-15.011	-16.006	29.672	1.00	23.93	C
ATOM	2784	OE1	GLU	A	354	-14.145	-15.338	30.288	1.00	22.57	O
ATOM	2785	OE2	GLU	A	354	-14.727	-16.952	28.905	1.00	22.72	O1-
ATOM	2786	N	THR	A	355	-16.746	-14.776	33.353	1.00	22.89	N
ATOM	2787	CA	THR	A	355	-16.424	-15.652	34.455	1.00	21.39	C
ATOM	2788	C	THR	A	355	-17.689	-15.821	35.259	1.00	23.76	C
ATOM	2789	O	THR	A	355	-18.292	-16.908	35.252	1.00	24.10	O
ATOM	2790	CB	THR	A	355	-15.414	-15.041	35.375	1.00	22.64	C
ATOM	2791	CG2	THR	A	355	-14.930	-16.101	36.358	1.00	23.56	C
ATOM	2792	OG1	THR	A	355	-14.333	-14.484	34.609	1.00	23.91	O

ATOM	2793	N	THR	A	356	-18.140	-14.704	35.852	1.00	23.40	N
ATOM	2794	CA	THR	A	356	-19.244	-14.695	36.812	1.00	23.16	C
ATOM	2795	C	THR	A	356	-20.470	-15.421	36.293	1.00	22.64	C
ATOM	2796	O	THR	A	356	-20.910	-16.389	36.901	1.00	24.94	O
ATOM	2797	CB	THR	A	356	-19.636	-13.257	37.216	1.00	24.04	C
ATOM	2798	CG2	THR	A	356	-21.004	-13.225	37.905	1.00	21.12	C
ATOM	2799	OG1	THR	A	356	-18.647	-12.740	38.121	1.00	28.79	O
ATOM	2800	N	LEU	A	357	-20.936	-15.060	35.105	1.00	19.87	N
ATOM	2801	CA	LEU	A	357	-22.092	-15.724	34.542	1.00	16.07	C
ATOM	2802	C	LEU	A	357	-21.893	-17.215	34.408	1.00	16.68	C
ATOM	2803	O	LEU	A	357	-22.844	-17.937	34.102	1.00	16.65	O
ATOM	2804	CB	LEU	A	357	-22.428	-15.140	33.189	1.00	13.80	C
ATOM	2805	CG	LEU	A	357	-23.662	-14.274	33.305	1.00	14.12	C
ATOM	2806	CD1	LEU	A	357	-23.278	-12.964	33.979	1.00	11.35	C
ATOM	2807	CD2	LEU	A	357	-24.275	-14.076	31.936	1.00	9.43	C
ATOM	2808	N	GLU	A	358	-20.639	-17.653	34.510	1.00	18.54	N
ATOM	2809	CA	GLU	A	358	-20.306	-19.077	34.509	1.00	22.18	C
ATOM	2810	C	GLU	A	358	-20.175	-19.565	35.932	1.00	23.29	C
ATOM	2811	O	GLU	A	358	-20.495	-20.722	36.210	1.00	25.03	O
ATOM	2812	CB	GLU	A	358	-19.004	-19.353	33.731	1.00	25.37	C
ATOM	2813	CG	GLU	A	358	-19.208	-20.016	32.329	1.00	29.81	C
ATOM	2814	CD	GLU	A	358	-19.717	-19.054	31.220	1.00	30.46	C
ATOM	2815	OE1	GLU	A	358	-18.859	-18.380	30.586	1.00	30.40	O
ATOM	2816	OE2	GLU	A	358	-20.946	-19.046	30.925	1.00	25.21	O1-
ATOM	2817	N	LYS	A	359	-19.818	-18.642	36.833	1.00	22.28	N
ATOM	2818	CA	LYS	A	359	-19.902	-18.823	38.294	1.00	21.07	C
ATOM	2819	C	LYS	A	359	-21.329	-19.097	38.762	1.00	21.42	C
ATOM	2820	O	LYS	A	359	-21.543	-19.518	39.903	1.00	21.98	O
ATOM	2821	CB	LYS	A	359	-19.409	-17.562	39.021	1.00	20.11	C
ATOM	2822	CG	LYS	A	359	-18.134	-17.700	39.848	1.00	22.37	C
ATOM	2823	CD	LYS	A	359	-17.703	-19.159	40.055	1.00	24.00	C
ATOM	2824	CE	LYS	A	359	-16.830	-19.349	41.307	1.00	24.54	C
ATOM	2825	NZ	LYS	A	359	-17.624	-19.380	42.606	1.00	21.49	N1+
ATOM	2826	N	CYS	A	360	-22.304	-18.705	37.946	1.00	22.87	N
ATOM	2827	CA	CYS	A	360	-23.709	-18.847	38.318	1.00	24.14	C
ATOM	2828	C	CYS	A	360	-24.710	-18.775	37.158	1.00	23.71	C
ATOM	2829	O	CYS	A	360	-25.613	-17.929	37.133	1.00	24.52	O
ATOM	2830	CB	CYS	A	360	-24.057	-17.808	39.374	1.00	24.78	C
ATOM	2831	SG	CYS	A	360	-22.748	-16.563	39.608	1.00	26.85	S
ATOM	2832	N	CYS	A	361	-24.405	-19.527	36.113	1.00	22.64	N
ATOM	2833	CA	CYS	A	361	-25.419	-20.138	35.292	1.00	22.37	C
ATOM	2834	C	CYS	A	361	-25.485	-21.605	35.702	1.00	23.29	C
ATOM	2835	O	CYS	A	361	-26.339	-22.359	35.231	1.00	23.57	O
ATOM	2836	CB	CYS	A	361	-25.025	-20.055	33.828	1.00	23.14	C
ATOM	2837	SG	CYS	A	361	-26.368	-19.332	32.880	1.00	26.83	S
ATOM	2838	N	ALA	A	362	-24.508	-22.030	36.497	1.00	23.59	N
ATOM	2839	CA	ALA	A	362	-24.434	-23.405	36.944	1.00	25.12	C
ATOM	2840	C	ALA	A	362	-25.368	-23.670	38.107	1.00	25.80	C
ATOM	2841	O	ALA	A	362	-26.545	-23.951	37.901	1.00	26.67	O
ATOM	2842	CB	ALA	A	362	-22.999	-23.748	37.342	1.00	27.30	C
ATOM	2843	N	ALA	A	363	-24.858	-23.502	39.326	1.00	23.91	N
ATOM	2844	CA	ALA	A	363	-25.445	-24.155	40.488	1.00	26.21	C
ATOM	2845	C	ALA	A	363	-26.359	-23.304	41.386	1.00	26.42	C
ATOM	2846	O	ALA	A	363	-26.234	-22.069	41.407	1.00	24.96	O
ATOM	2847	CB	ALA	A	363	-24.331	-24.804	41.343	1.00	25.36	C
ATOM	2848	N	ALA	A	364	-27.415	-23.948	41.912	1.00	28.14	N
ATOM	2849	CA	ALA	A	364	-28.010	-23.673	43.236	1.00	31.01	C
ATOM	2850	C	ALA	A	364	-28.676	-22.323	43.366	1.00	32.95	C
ATOM	2851	O	ALA	A	364	-28.424	-21.582	44.343	1.00	33.01	O
ATOM	2852	CB	ALA	A	364	-26.941	-23.792	44.302	1.00	32.09	C
ATOM	2853	N	ASP	A	365	-29.630	-22.080	42.470	1.00	33.49	N
ATOM	2854	CA	ASP	A	365	-30.065	-20.719	42.092	1.00	32.31	C
ATOM	2855	C	ASP	A	365	-30.308	-19.789	43.290	1.00	34.06	C
ATOM	2856	O	ASP	A	365	-30.266	-20.216	44.442	1.00	35.19	O
ATOM	2857	CB	ASP	A	365	-31.305	-20.839	41.165	1.00	30.17	C
ATOM	2858	CG	ASP	A	365	-32.215	-21.973	41.556	1.00	27.56	C
ATOM	2859	OD1	ASP	A	365	-32.811	-21.879	42.644	1.00	25.00	O
ATOM	2860	OD2	ASP	A	365	-32.379	-22.899	40.741	1.00	24.35	O1-
ATOM	2861	N	PRO	A	366	-30.401	-18.469	43.078	1.00	34.76	N
ATOM	2862	CA	PRO	A	366	-31.123	-17.957	41.922	1.00	34.85	C
ATOM	2863	C	PRO	A	366	-30.281	-16.923	41.199	1.00	35.81	C

ATOM	2864	O	PRO	A	366	-29.071	-17.095	41.054	1.00	36.75	O
ATOM	2865	CB	PRO	A	366	-32.402	-17.379	42.539	1.00	33.58	C
ATOM	2866	CG	PRO	A	366	-31.998	-16.969	43.986	1.00	34.17	C
ATOM	2867	CD	PRO	A	366	-30.585	-17.580	44.243	1.00	35.22	C
ATOM	2868	N	HIS	A	367	-30.879	-15.760	40.952	1.00	35.99	N
ATOM	2869	CA	HIS	A	367	-30.318	-14.767	40.058	1.00	32.68	C
ATOM	2870	C	HIS	A	367	-29.370	-13.770	40.677	1.00	32.19	C
ATOM	2871	O	HIS	A	367	-28.438	-13.300	40.019	1.00	32.60	O
ATOM	2872	CB	HIS	A	367	-31.447	-14.017	39.383	1.00	30.02	C
ATOM	2873	CG	HIS	A	367	-31.860	-14.638	38.108	1.00	25.99	C
ATOM	2874	CD2	HIS	A	367	-32.718	-14.223	37.152	1.00	26.12	C
ATOM	2875	ND1	HIS	A	367	-31.248	-15.773	37.620	1.00	25.25	N
ATOM	2876	CE1	HIS	A	367	-31.706	-16.026	36.408	1.00	27.08	C
ATOM	2877	NE2	HIS	A	367	-32.598	-15.099	36.097	1.00	29.00	N
ATOM	2878	N	GLU	A	368	-29.538	-13.526	41.962	1.00	30.39	N
ATOM	2879	CA	GLU	A	368	-28.843	-12.426	42.577	1.00	29.24	C
ATOM	2880	C	GLU	A	368	-27.331	-12.453	42.287	1.00	28.13	C
ATOM	2881	O	GLU	A	368	-26.729	-11.384	42.163	1.00	26.88	O
ATOM	2882	CB	GLU	A	368	-29.136	-12.413	44.090	1.00	29.55	C
ATOM	2883	CG	GLU	A	368	-30.634	-12.566	44.422	1.00	25.73	C
ATOM	2884	CD	GLU	A	368	-31.265	-11.300	44.974	1.00	24.58	C
ATOM	2885	OE1	GLU	A	368	-30.521	-10.338	45.266	1.00	25.16	O
ATOM	2886	OE2	GLU	A	368	-32.498	-11.296	45.176	1.00	21.06	O1-
ATOM	2887	N	CYS	A	369	-26.758	-13.638	42.021	1.00	26.26	N
ATOM	2888	CA	CYS	A	369	-25.313	-13.757	41.759	1.00	24.90	C
ATOM	2889	C	CYS	A	369	-24.874	-12.701	40.778	1.00	25.23	C
ATOM	2890	O	CYS	A	369	-23.911	-12.003	41.032	1.00	25.76	O
ATOM	2891	CB	CYS	A	369	-24.941	-15.093	41.136	1.00	25.85	C
ATOM	2892	SG	CYS	A	369	-23.840	-14.850	39.683	1.00	28.33	S
ATOM	2893	N	TYR	A	370	-25.488	-12.721	39.593	1.00	24.71	N
ATOM	2894	CA	TYR	A	370	-25.245	-11.722	38.563	1.00	23.51	C
ATOM	2895	C	TYR	A	370	-26.029	-10.420	38.757	1.00	24.62	C
ATOM	2896	O	TYR	A	370	-25.953	-9.523	37.906	1.00	23.98	O
ATOM	2897	CB	TYR	A	370	-25.537	-12.308	37.178	1.00	24.52	C
ATOM	2898	CG	TYR	A	370	-26.989	-12.560	36.798	1.00	22.90	C
ATOM	2899	CD1	TYR	A	370	-27.771	-11.529	36.277	1.00	24.94	C
ATOM	2900	CD2	TYR	A	370	-27.445	-13.861	36.605	1.00	22.80	C
ATOM	2901	CE1	TYR	A	370	-28.942	-11.789	35.548	1.00	23.26	C
ATOM	2902	CE2	TYR	A	370	-28.605	-14.126	35.880	1.00	21.68	C
ATOM	2903	CZ	TYR	A	370	-29.347	-13.085	35.357	1.00	22.31	C
ATOM	2904	OH	TYR	A	370	-30.530	-13.345	34.705	1.00	19.63	O
ATOM	2905	N	ALA	A	371	-26.806	-10.341	39.843	1.00	22.53	N
ATOM	2906	CA	ALA	A	371	-27.517	-9.121	40.212	1.00	20.95	C
ATOM	2907	C	ALA	A	371	-26.534	-8.002	40.483	1.00	21.22	C
ATOM	2908	O	ALA	A	371	-25.767	-8.032	41.452	1.00	18.20	O
ATOM	2909	CB	ALA	A	371	-28.392	-9.347	41.437	1.00	20.29	C
ATOM	2910	N	LYS	A	372	-26.618	-6.979	39.644	1.00	23.07	N
ATOM	2911	CA	LYS	A	372	-25.638	-5.897	39.648	1.00	26.70	C
ATOM	2912	C	LYS	A	372	-24.221	-6.384	39.978	1.00	28.46	C
ATOM	2913	O	LYS	A	372	-23.624	-5.993	41.000	1.00	26.84	O
ATOM	2914	CB	LYS	A	372	-26.041	-4.787	40.619	1.00	25.91	C
ATOM	2915	CG	LYS	A	372	-27.377	-4.140	40.291	1.00	25.48	C
ATOM	2916	CD	LYS	A	372	-27.886	-3.362	41.489	1.00	21.87	C
ATOM	2917	CE	LYS	A	372	-26.866	-2.361	41.922	1.00	18.47	C
ATOM	2918	NZ	LYS	A	372	-26.407	-1.618	40.728	1.00	20.65	N1+
ATOM	2919	N	VAL	A	373	-23.710	-7.262	39.109	1.00	27.77	N
ATOM	2920	CA	VAL	A	373	-22.311	-7.224	38.739	1.00	24.92	C
ATOM	2921	C	VAL	A	373	-21.958	-5.773	38.482	1.00	24.34	C
ATOM	2922	O	VAL	A	373	-20.982	-5.276	39.007	1.00	23.37	O
ATOM	2923	CB	VAL	A	373	-22.036	-8.008	37.459	1.00	25.87	C
ATOM	2924	CG1	VAL	A	373	-21.594	-9.423	37.811	1.00	27.81	C
ATOM	2925	CG2	VAL	A	373	-23.271	-8.017	36.564	1.00	25.54	C
ATOM	2926	N	PHE	A	374	-22.878	-5.047	37.856	1.00	25.35	N
ATOM	2927	CA	PHE	A	374	-22.738	-3.597	37.666	1.00	25.95	C
ATOM	2928	C	PHE	A	374	-22.261	-2.928	38.950	1.00	26.20	C
ATOM	2929	O	PHE	A	374	-21.593	-1.880	38.921	1.00	21.77	O
ATOM	2930	CB	PHE	A	374	-24.083	-2.995	37.222	1.00	25.29	C
ATOM	2931	CG	PHE	A	374	-24.338	-3.095	35.744	1.00	24.61	C
ATOM	2932	CD1	PHE	A	374	-23.850	-4.157	35.010	1.00	25.83	C
ATOM	2933	CD2	PHE	A	374	-25.029	-2.096	35.083	1.00	27.32	C
ATOM	2934	CE1	PHE	A	374	-24.043	-4.218	33.648	1.00	27.69	C

ATOM	2935	CE2	PHE	A	374	-25.224	-2.145	33.714	1.00	26.77	C
ATOM	2936	CZ	PHE	A	374	-24.731	-3.208	32.999	1.00	27.96	C
ATOM	2937	N	ASP	A	375	-22.562	-3.601	40.064	1.00	29.26	N
ATOM	2938	CA	ASP	A	375	-22.212	-3.148	41.409	1.00	31.59	C
ATOM	2939	C	ASP	A	375	-21.374	-4.155	42.225	1.00	29.82	C
ATOM	2940	O	ASP	A	375	-21.614	-4.358	43.415	1.00	29.59	O
ATOM	2941	CB	ASP	A	375	-23.477	-2.747	42.176	1.00	31.39	C
ATOM	2942	CG	ASP	A	375	-23.954	-1.340	41.817	1.00	32.35	C
ATOM	2943	OD1	ASP	A	375	-23.865	-0.935	40.627	1.00	30.78	O
ATOM	2944	OD2	ASP	A	375	-24.511	-0.658	42.715	1.00	36.30	O1-
ATOM	2945	N	GLU	A	376	-20.457	-4.836	41.539	1.00	28.50	N
ATOM	2946	CA	GLU	A	376	-19.115	-5.035	42.053	1.00	26.94	C
ATOM	2947	C	GLU	A	376	-18.043	-5.009	40.962	1.00	26.28	C
ATOM	2948	O	GLU	A	376	-16.887	-5.333	41.245	1.00	28.07	O
ATOM	2949	CB	GLU	A	376	-19.002	-6.334	42.848	1.00	29.11	C
ATOM	2950	CG	GLU	A	376	-19.509	-7.591	42.165	1.00	29.86	C
ATOM	2951	CD	GLU	A	376	-18.961	-7.787	40.769	1.00	28.06	C
ATOM	2952	OE1	GLU	A	376	-17.736	-7.935	40.608	1.00	29.85	O
ATOM	2953	OE2	GLU	A	376	-19.768	-7.812	39.828	1.00	27.54	O1-
ATOM	2954	N	PHE	A	377	-18.435	-4.748	39.709	1.00	21.99	N
ATOM	2955	CA	PHE	A	377	-17.479	-4.330	38.674	1.00	17.15	C
ATOM	2956	C	PHE	A	377	-16.712	-3.219	39.354	1.00	17.60	C
ATOM	2957	O	PHE	A	377	-15.582	-3.419	39.769	1.00	18.80	O
ATOM	2958	CB	PHE	A	377	-18.158	-3.679	37.448	1.00	14.09	C
ATOM	2959	CG	PHE	A	377	-18.727	-4.640	36.433	1.00	5.40	C
ATOM	2960	CD1	PHE	A	377	-18.294	-5.932	36.335	1.00	3.20	C
ATOM	2961	CD2	PHE	A	377	-19.749	-4.233	35.616	1.00	2.00	C
ATOM	2962	CE1	PHE	A	377	-18.883	-6.791	35.456	1.00	2.00	C
ATOM	2963	CE2	PHE	A	377	-20.325	-5.088	34.742	1.00	2.00	C
ATOM	2964	CZ	PHE	A	377	-19.896	-6.362	34.666	1.00	2.00	C
ATOM	2965	N	LYS	A	378	-17.484	-2.219	39.775	1.00	17.81	N
ATOM	2966	CA	LYS	A	378	-17.005	-0.869	40.084	1.00	17.26	C
ATOM	2967	C	LYS	A	378	-15.683	-0.699	40.831	1.00	15.51	C
ATOM	2968	O	LYS	A	378	-15.089	0.362	40.777	1.00	14.50	O
ATOM	2969	CB	LYS	A	378	-18.106	-0.082	40.813	1.00	17.88	C
ATOM	2970	CG	LYS	A	378	-17.952	1.453	40.765	1.00	18.67	C
ATOM	2971	CD	LYS	A	378	-19.143	2.216	41.408	1.00	16.76	C
ATOM	2972	CE	LYS	A	378	-19.247	2.011	42.921	1.00	15.54	C
ATOM	2973	NZ	LYS	A	378	-19.884	0.728	43.329	1.00	9.93	N1+
ATOM	2974	N	PRO	A	379	-15.161	-1.749	41.468	1.00	15.24	N
ATOM	2975	CA	PRO	A	379	-13.732	-1.558	41.696	1.00	17.61	C
ATOM	2976	C	PRO	A	379	-12.965	-1.316	40.391	1.00	19.67	C
ATOM	2977	O	PRO	A	379	-12.378	-0.234	40.207	1.00	20.74	O
ATOM	2978	CB	PRO	A	379	-13.302	-2.852	42.408	1.00	17.69	C
ATOM	2979	CG	PRO	A	379	-14.565	-3.698	42.537	1.00	15.99	C
ATOM	2980	CD	PRO	A	379	-15.707	-2.740	42.404	1.00	15.75	C
ATOM	2981	N	LEU	A	380	-13.078	-2.261	39.450	1.00	18.64	N
ATOM	2982	CA	LEU	A	380	-12.334	-2.227	38.183	1.00	16.78	C
ATOM	2983	C	LEU	A	380	-12.899	-1.233	37.170	1.00	16.37	C
ATOM	2984	O	LEU	A	380	-13.224	-1.618	36.052	1.00	15.89	O
ATOM	2985	CB	LEU	A	380	-12.274	-3.625	37.545	1.00	12.95	C
ATOM	2986	CG	LEU	A	380	-13.247	-4.733	37.928	1.00	11.61	C
ATOM	2987	CD1	LEU	A	380	-13.959	-5.227	36.703	1.00	10.69	C
ATOM	2988	CD2	LEU	A	380	-12.504	-5.870	38.586	1.00	10.18	C
ATOM	2989	N	VAL	A	381	-13.112	0.004	37.626	1.00	16.46	N
ATOM	2990	CA	VAL	A	381	-13.610	1.151	36.844	1.00	16.90	C
ATOM	2991	C	VAL	A	381	-13.242	2.411	37.648	1.00	17.54	C
ATOM	2992	O	VAL	A	381	-13.279	3.526	37.143	1.00	18.24	O
ATOM	2993	CB	VAL	A	381	-15.167	1.160	36.674	1.00	16.00	C
ATOM	2994	CG1	VAL	A	381	-15.587	2.360	35.866	1.00	15.15	C
ATOM	2995	CG2	VAL	A	381	-15.668	-0.096	35.995	1.00	15.14	C
ATOM	2996	N	GLU	A	382	-12.936	2.228	38.926	1.00	19.02	N
ATOM	2997	CA	GLU	A	382	-12.424	3.318	39.744	1.00	20.65	C
ATOM	2998	C	GLU	A	382	-10.913	3.520	39.525	1.00	19.24	C
ATOM	2999	O	GLU	A	382	-10.503	4.596	39.114	1.00	18.63	O
ATOM	3000	CB	GLU	A	382	-12.740	3.080	41.245	1.00	24.33	C
ATOM	3001	CG	GLU	A	382	-14.261	3.175	41.666	1.00	22.93	C
ATOM	3002	CD	GLU	A	382	-14.712	4.589	42.012	1.00	23.13	C
ATOM	3003	OE1	GLU	A	382	-13.975	5.273	42.751	1.00	26.43	O
ATOM	3004	OE2	GLU	A	382	-15.776	5.038	41.527	1.00	21.00	O1-
ATOM	3005	N	GLU	A	383	-10.115	2.456	39.602	1.00	20.27	N

ATOM	3006	CA	GLU	A	383	-8.643	2.609	39.553	1.00	20.93	C
ATOM	3007	C	GLU	A	383	-8.048	3.427	38.400	1.00	17.88	C
ATOM	3008	O	GLU	A	383	-7.189	4.253	38.640	1.00	18.41	O
ATOM	3009	CB	GLU	A	383	-7.916	1.246	39.643	1.00	24.93	C
ATOM	3010	CG	GLU	A	383	-6.405	1.261	39.272	1.00	22.82	C
ATOM	3011	CD	GLU	A	383	-5.485	1.591	40.440	1.00	22.48	C
ATOM	3012	OE1	GLU	A	383	-5.574	2.732	40.956	1.00	21.74	O
ATOM	3013	OE2	GLU	A	383	-4.621	0.737	40.781	1.00	19.05	O1-
ATOM	3014	N	PRO	A	384	-8.487	3.215	37.153	1.00	14.01	N
ATOM	3015	CA	PRO	A	384	-8.206	4.228	36.135	1.00	15.62	C
ATOM	3016	C	PRO	A	384	-8.687	5.643	36.491	1.00	18.77	C
ATOM	3017	O	PRO	A	384	-7.860	6.487	36.866	1.00	20.60	O
ATOM	3018	CB	PRO	A	384	-8.890	3.683	34.890	1.00	14.10	C
ATOM	3019	CG	PRO	A	384	-9.622	2.425	35.353	1.00	14.48	C
ATOM	3020	CD	PRO	A	384	-8.870	1.952	36.529	1.00	13.10	C
ATOM	3021	N	GLN	A	385	-10.005	5.890	36.426	1.00	19.75	N
ATOM	3022	CA	GLN	A	385	-10.623	7.176	36.806	1.00	19.44	C
ATOM	3023	C	GLN	A	385	-9.841	7.869	37.909	1.00	19.08	C
ATOM	3024	O	GLN	A	385	-9.943	9.075	38.105	1.00	19.58	O
ATOM	3025	CB	GLN	A	385	-12.068	6.967	37.300	1.00	18.93	C
ATOM	3026	CG	GLN	A	385	-13.135	7.054	36.222	1.00	22.91	C
ATOM	3027	CD	GLN	A	385	-14.452	7.633	36.729	1.00	27.37	C
ATOM	3028	NE2	GLN	A	385	-14.359	8.627	37.618	1.00	29.27	N
ATOM	3029	OE1	GLN	A	385	-15.538	7.269	36.248	1.00	23.96	O
ATOM	3030	N	ASN	A	386	-9.198	7.062	38.735	1.00	19.76	N
ATOM	3031	CA	ASN	A	386	-8.384	7.586	39.800	1.00	22.19	C
ATOM	3032	C	ASN	A	386	-6.935	7.815	39.379	1.00	20.96	C
ATOM	3033	O	ASN	A	386	-6.552	8.967	39.235	1.00	20.97	O
ATOM	3034	CB	ASN	A	386	-8.524	6.695	41.050	1.00	23.37	C
ATOM	3035	CG	ASN	A	386	-9.864	6.933	41.789	1.00	24.44	C
ATOM	3036	ND2	ASN	A	386	-10.081	8.176	42.227	1.00	19.73	N
ATOM	3037	OD1	ASN	A	386	-10.734	6.045	41.845	1.00	22.44	O
ATOM	3038	N	LEU	A	387	-6.223	6.749	38.991	1.00	20.99	N
ATOM	3039	CA	LEU	A	387	-4.777	6.761	38.639	1.00	19.03	C
ATOM	3040	C	LEU	A	387	-4.344	7.967	37.800	1.00	19.94	C
ATOM	3041	O	LEU	A	387	-3.326	8.605	38.088	1.00	15.85	O
ATOM	3042	CB	LEU	A	387	-4.387	5.459	37.888	1.00	16.60	C
ATOM	3043	CG	LEU	A	387	-2.952	5.202	37.368	1.00	14.35	C
ATOM	3044	CD1	LEU	A	387	-2.328	3.996	38.035	1.00	8.49	C
ATOM	3045	CD2	LEU	A	387	-2.974	4.987	35.868	1.00	12.25	C
ATOM	3046	N	ILE	A	388	-5.183	8.336	36.838	1.00	21.75	N
ATOM	3047	CA	ILE	A	388	-4.984	9.544	36.034	1.00	24.55	C
ATOM	3048	C	ILE	A	388	-5.094	10.847	36.880	1.00	26.81	C
ATOM	3049	O	ILE	A	388	-5.268	11.943	36.341	1.00	26.63	O
ATOM	3050	CB	ILE	A	388	-6.000	9.592	34.822	1.00	22.71	C
ATOM	3051	CG1	ILE	A	388	-6.237	8.196	34.243	1.00	18.19	C
ATOM	3052	CG2	ILE	A	388	-5.417	10.407	33.692	1.00	22.80	C
ATOM	3053	CD1	ILE	A	388	-4.998	7.574	33.621	1.00	16.41	C
ATOM	3054	N	LYS	A	389	-5.028	10.699	38.205	1.00	29.41	N
ATOM	3055	CA	LYS	A	389	-4.770	11.788	39.136	1.00	30.13	C
ATOM	3056	C	LYS	A	389	-3.251	11.818	39.376	1.00	30.26	C
ATOM	3057	O	LYS	A	389	-2.558	12.722	38.899	1.00	30.98	O
ATOM	3058	CB	LYS	A	389	-5.517	11.556	40.468	1.00	33.95	C
ATOM	3059	CG	LYS	A	389	-5.040	12.458	41.657	1.00	35.82	C
ATOM	3060	CD	LYS	A	389	-5.674	12.085	43.010	1.00	34.70	C
ATOM	3061	CE	LYS	A	389	-6.883	12.973	43.356	1.00	35.61	C
ATOM	3062	NZ	LYS	A	389	-8.212	12.441	42.868	1.00	33.54	N1+
ATOM	3063	N	GLN	A	390	-2.709	10.787	40.017	1.00	29.25	N
ATOM	3064	CA	GLN	A	390	-1.259	10.707	40.162	1.00	28.68	C
ATOM	3065	C	GLN	A	390	-0.642	10.117	38.874	1.00	27.03	C
ATOM	3066	O	GLN	A	390	0.333	9.360	38.911	1.00	26.91	O
ATOM	3067	CB	GLN	A	390	-0.882	9.887	41.406	1.00	29.73	C
ATOM	3068	CG	GLN	A	390	0.416	10.334	42.107	1.00	28.58	C
ATOM	3069	CD	GLN	A	390	0.193	11.454	43.108	1.00	29.76	C
ATOM	3070	NE2	GLN	A	390	-0.114	11.089	44.353	1.00	30.78	N
ATOM	3071	OE1	GLN	A	390	0.315	12.635	42.775	1.00	30.93	O
ATOM	3072	N	ASN	A	391	-1.358	10.288	37.772	1.00	24.04	N
ATOM	3073	CA	ASN	A	391	-0.718	10.582	36.515	1.00	22.15	C
ATOM	3074	C	ASN	A	391	-0.857	12.091	36.495	1.00	18.92	C
ATOM	3075	O	ASN	A	391	-0.065	12.773	37.132	1.00	18.87	O
ATOM	3076	CB	ASN	A	391	-1.487	9.959	35.334	1.00	28.55	C

ATOM	3077	CG	ASN	A	391	-0.680	8.877	34.571	1.00	33.87	C
ATOM	3078	ND2	ASN	A	391	0.535	8.555	35.050	1.00	36.03	N
ATOM	3079	OD1	ASN	A	391	-1.189	8.289	33.605	1.00	33.57	O
ATOM	3080	N	CYS	A	392	-2.048	12.556	36.135	1.00	16.20	N
ATOM	3081	CA	CYS	A	392	-2.222	13.923	35.670	1.00	13.67	C
ATOM	3082	C	CYS	A	392	-2.326	14.985	36.745	1.00	13.13	C
ATOM	3083	O	CYS	A	392	-2.971	16.008	36.549	1.00	15.19	O
ATOM	3084	CB	CYS	A	392	-3.420	14.004	34.730	1.00	11.64	C
ATOM	3085	SG	CYS	A	392	-3.165	13.048	33.210	1.00	12.44	S
ATOM	3086	N	GLU	A	393	-1.503	14.864	37.768	1.00	14.75	N
ATOM	3087	CA	GLU	A	393	-1.268	16.000	38.653	1.00	19.49	C
ATOM	3088	C	GLU	A	393	0.227	16.228	38.975	1.00	20.11	C
ATOM	3089	O	GLU	A	393	0.754	17.335	38.787	1.00	18.94	O
ATOM	3090	CB	GLU	A	393	-2.081	15.840	39.940	1.00	20.40	C
ATOM	3091	CG	GLU	A	393	-2.403	17.152	40.613	1.00	20.82	C
ATOM	3092	CD	GLU	A	393	-3.414	16.997	41.713	1.00	22.54	C
ATOM	3093	OE1	GLU	A	393	-3.048	16.456	42.785	1.00	24.39	O
ATOM	3094	OE2	GLU	A	393	-4.574	17.418	41.505	1.00	24.30	O1-
ATOM	3095	N	LEU	A	394	0.908	15.165	39.396	1.00	19.67	N
ATOM	3096	CA	LEU	A	394	2.353	15.160	39.518	1.00	21.83	C
ATOM	3097	C	LEU	A	394	2.947	15.795	38.259	1.00	24.26	C
ATOM	3098	O	LEU	A	394	3.959	16.503	38.286	1.00	26.00	O
ATOM	3099	CB	LEU	A	394	2.839	13.722	39.646	1.00	21.88	C
ATOM	3100	CG	LEU	A	394	4.062	13.487	40.531	1.00	23.92	C
ATOM	3101	CD1	LEU	A	394	5.242	14.340	40.026	1.00	25.67	C
ATOM	3102	CD2	LEU	A	394	3.724	13.789	41.997	1.00	21.11	C
ATOM	3103	N	PHE	A	395	2.277	15.598	37.142	1.00	25.37	N
ATOM	3104	CA	PHE	A	395	2.708	16.304	35.965	1.00	25.77	C
ATOM	3105	C	PHE	A	395	2.196	17.746	35.907	1.00	26.16	C
ATOM	3106	O	PHE	A	395	2.988	18.663	36.144	1.00	26.53	O
ATOM	3107	CB	PHE	A	395	2.361	15.469	34.744	1.00	25.66	C
ATOM	3108	CG	PHE	A	395	3.224	14.254	34.625	1.00	26.69	C
ATOM	3109	CD1	PHE	A	395	4.603	14.367	34.780	1.00	26.93	C
ATOM	3110	CD2	PHE	A	395	2.676	13.000	34.460	1.00	26.92	C
ATOM	3111	CE1	PHE	A	395	5.417	13.264	34.773	1.00	25.90	C
ATOM	3112	CE2	PHE	A	395	3.487	11.886	34.451	1.00	29.35	C
ATOM	3113	CZ	PHE	A	395	4.867	12.022	34.609	1.00	28.67	C
ATOM	3114	N	GLU	A	396	0.868	17.902	35.930	1.00	24.62	N
ATOM	3115	CA	GLU	A	396	0.191	19.186	35.745	1.00	22.66	C
ATOM	3116	C	GLU	A	396	0.982	20.346	36.329	1.00	24.98	C
ATOM	3117	O	GLU	A	396	1.905	20.842	35.684	1.00	25.79	O
ATOM	3118	CB	GLU	A	396	-1.209	19.129	36.363	1.00	21.41	C
ATOM	3119	CG	GLU	A	396	-2.062	20.342	36.075	1.00	18.86	C
ATOM	3120	CD	GLU	A	396	-3.511	20.135	36.448	1.00	19.66	C
ATOM	3121	OE1	GLU	A	396	-4.119	19.159	35.965	1.00	21.53	O
ATOM	3122	OE2	GLU	A	396	-4.056	20.951	37.210	1.00	16.14	O1-
ATOM	3123	N	GLN	A	397	0.686	20.717	37.577	1.00	28.23	N
ATOM	3124	CA	GLN	A	397	1.460	21.738	38.288	1.00	27.32	C
ATOM	3125	C	GLN	A	397	2.530	20.945	38.997	1.00	25.36	C
ATOM	3126	O	GLN	A	397	2.351	20.612	40.158	1.00	22.92	O
ATOM	3127	CB	GLN	A	397	0.595	22.527	39.326	1.00	28.36	C
ATOM	3128	CG	GLN	A	397	1.354	23.682	40.097	1.00	26.26	C
ATOM	3129	CD	GLN	A	397	0.487	24.528	41.064	1.00	25.26	C
ATOM	3130	NE2	GLN	A	397	-0.812	24.290	41.070	1.00	27.07	N
ATOM	3131	OE1	GLN	A	397	1.011	25.332	41.847	1.00	24.51	O
ATOM	3132	N	LEU	A	398	3.461	20.405	38.210	1.00	25.94	N
ATOM	3133	CA	LEU	A	398	4.677	19.792	38.751	1.00	26.57	C
ATOM	3134	C	LEU	A	398	5.577	19.106	37.699	1.00	24.32	C
ATOM	3135	O	LEU	A	398	6.460	18.340	38.071	1.00	22.18	O
ATOM	3136	CB	LEU	A	398	4.328	18.793	39.899	1.00	29.28	C
ATOM	3137	CG	LEU	A	398	4.839	18.900	41.365	1.00	29.60	C
ATOM	3138	CD1	LEU	A	398	4.218	20.072	42.135	1.00	29.70	C
ATOM	3139	CD2	LEU	A	398	4.513	17.604	42.113	1.00	27.39	C
ATOM	3140	N	GLY	A	399	5.407	19.409	36.409	1.00	24.36	N
ATOM	3141	CA	GLY	A	399	6.447	19.039	35.442	1.00	26.34	C
ATOM	3142	C	GLY	A	399	6.243	18.217	34.146	1.00	25.35	C
ATOM	3143	O	GLY	A	399	6.431	16.983	34.105	1.00	24.71	O
ATOM	3144	N	GLU	A	400	6.272	18.954	33.041	1.00	23.31	N
ATOM	3145	CA	GLU	A	400	6.309	18.381	31.700	1.00	21.85	C
ATOM	3146	C	GLU	A	400	7.499	17.394	31.494	1.00	21.88	C
ATOM	3147	O	GLU	A	400	7.351	16.186	31.628	1.00	20.25	O

ATOM	3148	CB	GLU	A	400	6.389	19.544	30.704	1.00	18.99	C
ATOM	3149	CG	GLU	A	400	5.051	20.164	30.301	1.00	18.80	C
ATOM	3150	CD	GLU	A	400	4.368	21.016	31.372	1.00	15.88	C
ATOM	3151	OE1	GLU	A	400	4.576	20.786	32.574	1.00	13.73	O
ATOM	3152	OE2	GLU	A	400	3.524	21.862	30.999	1.00	14.44	O1-
ATOM	3153	N	TYR	A	401	8.701	17.951	31.356	1.00	22.47	N
ATOM	3154	CA	TYR	A	401	9.926	17.216	31.020	1.00	20.38	C
ATOM	3155	C	TYR	A	401	10.935	17.239	32.181	1.00	19.52	C
ATOM	3156	O	TYR	A	401	12.064	16.790	32.033	1.00	18.53	O
ATOM	3157	CB	TYR	A	401	10.554	17.881	29.797	1.00	23.78	C
ATOM	3158	CG	TYR	A	401	11.448	16.997	28.969	1.00	25.15	C
ATOM	3159	CD1	TYR	A	401	12.748	16.752	29.363	1.00	25.90	C
ATOM	3160	CD2	TYR	A	401	11.060	16.579	27.706	1.00	25.00	C
ATOM	3161	CE1	TYR	A	401	13.641	16.158	28.525	1.00	27.01	C
ATOM	3162	CE2	TYR	A	401	11.948	15.979	26.863	1.00	26.20	C
ATOM	3163	CZ	TYR	A	401	13.250	15.790	27.270	1.00	26.58	C
ATOM	3164	OH	TYR	A	401	14.209	15.388	26.375	1.00	22.64	O
ATOM	3165	N	LYS	A	402	10.621	18.021	33.211	1.00	22.60	N
ATOM	3166	CA	LYS	A	402	11.307	17.936	34.503	1.00	22.71	C
ATOM	3167	C	LYS	A	402	10.981	16.574	35.103	1.00	24.22	C
ATOM	3168	O	LYS	A	402	11.543	15.565	34.676	1.00	25.37	O
ATOM	3169	CB	LYS	A	402	10.845	19.067	35.435	1.00	20.39	C
ATOM	3170	CG	LYS	A	402	11.323	18.957	36.876	1.00	17.50	C
ATOM	3171	CD	LYS	A	402	12.633	19.686	37.105	1.00	17.85	C
ATOM	3172	CE	LYS	A	402	13.838	18.750	37.135	1.00	17.83	C
ATOM	3173	NZ	LYS	A	402	15.068	19.486	37.556	1.00	19.64	N1+
ATOM	3174	N	PHE	A	403	9.954	16.495	35.941	1.00	25.18	N
ATOM	3175	CA	PHE	A	403	9.679	15.217	36.562	1.00	28.48	C
ATOM	3176	C	PHE	A	403	8.640	14.362	35.850	1.00	30.15	C
ATOM	3177	O	PHE	A	403	7.621	13.986	36.423	1.00	30.31	O
ATOM	3178	CB	PHE	A	403	9.370	15.398	38.045	1.00	28.85	C
ATOM	3179	CG	PHE	A	403	10.610	15.601	38.886	1.00	30.05	C
ATOM	3180	CD1	PHE	A	403	11.155	16.860	39.037	1.00	28.78	C
ATOM	3181	CD2	PHE	A	403	11.326	14.511	39.371	1.00	29.76	C
ATOM	3182	CE1	PHE	A	403	12.393	17.026	39.632	1.00	28.52	C
ATOM	3183	CE2	PHE	A	403	12.561	14.677	39.967	1.00	26.34	C
ATOM	3184	CZ	PHE	A	403	13.097	15.928	40.092	1.00	26.88	C
ATOM	3185	N	GLN	A	404	8.911	14.106	34.565	1.00	32.37	N
ATOM	3186	CA	GLN	A	404	8.532	12.852	33.887	1.00	30.49	C
ATOM	3187	C	GLN	A	404	9.506	11.781	34.350	1.00	29.27	C
ATOM	3188	O	GLN	A	404	9.194	10.601	34.304	1.00	29.71	O
ATOM	3189	CB	GLN	A	404	8.648	12.975	32.361	1.00	31.75	C
ATOM	3190	CG	GLN	A	404	10.038	12.639	31.796	1.00	30.57	C
ATOM	3191	CD	GLN	A	404	10.134	12.873	30.298	1.00	31.42	C
ATOM	3192	NE2	GLN	A	404	9.715	11.891	29.507	1.00	30.06	N
ATOM	3193	OE1	GLN	A	404	10.548	13.942	29.858	1.00	31.82	O
ATOM	3194	N	ASN	A	405	10.695	12.196	34.786	1.00	27.19	N
ATOM	3195	CA	ASN	A	405	11.561	11.290	35.527	1.00	24.01	C
ATOM	3196	C	ASN	A	405	11.159	11.181	37.030	1.00	21.70	C
ATOM	3197	O	ASN	A	405	11.983	11.211	37.946	1.00	15.16	O
ATOM	3198	CB	ASN	A	405	13.033	11.663	35.278	1.00	22.91	C
ATOM	3199	CG	ASN	A	405	13.611	12.577	36.314	1.00	19.47	C
ATOM	3200	ND2	ASN	A	405	13.058	13.770	36.427	1.00	19.73	N
ATOM	3201	OD1	ASN	A	405	14.666	12.283	36.866	1.00	17.07	O
ATOM	3202	N	ALA	A	406	9.852	10.999	37.231	1.00	19.67	N
ATOM	3203	CA	ALA	A	406	9.294	10.467	38.458	1.00	18.79	C
ATOM	3204	C	ALA	A	406	8.941	9.011	38.194	1.00	20.96	C
ATOM	3205	O	ALA	A	406	9.168	8.141	39.044	1.00	23.15	O
ATOM	3206	CB	ALA	A	406	8.048	11.228	38.841	1.00	15.73	C
ATOM	3207	N	LEU	A	407	8.393	8.731	37.013	1.00	19.76	N
ATOM	3208	CA	LEU	A	407	7.955	7.379	36.692	1.00	16.89	C
ATOM	3209	C	LEU	A	407	9.136	6.433	36.519	1.00	17.14	C
ATOM	3210	O	LEU	A	407	8.978	5.221	36.655	1.00	15.99	O
ATOM	3211	CB	LEU	A	407	7.086	7.393	35.444	1.00	16.01	C
ATOM	3212	CG	LEU	A	407	5.659	7.835	35.763	1.00	18.48	C
ATOM	3213	CD1	LEU	A	407	4.978	8.430	34.540	1.00	20.67	C
ATOM	3214	CD2	LEU	A	407	4.871	6.641	36.285	1.00	20.49	C
ATOM	3215	N	LEU	A	408	10.317	6.998	36.250	1.00	18.02	N
ATOM	3216	CA	LEU	A	408	11.617	6.307	36.411	1.00	18.24	C
ATOM	3217	C	LEU	A	408	11.824	5.869	37.872	1.00	18.70	C
ATOM	3218	O	LEU	A	408	11.811	4.687	38.190	1.00	17.33	O

ATOM	3219	CB	LEU	A	408	12.767	7.250	36.018	1.00	18.19	C
ATOM	3220	CG	LEU	A	408	13.659	7.027	34.797	1.00	16.19	C
ATOM	3221	CD1	LEU	A	408	14.511	8.259	34.575	1.00	11.96	C
ATOM	3222	CD2	LEU	A	408	14.539	5.807	34.995	1.00	16.05	C
ATOM	3223	N	VAL	A	409	11.989	6.846	38.759	1.00	20.54	N
ATOM	3224	CA	VAL	A	409	12.091	6.603	40.193	1.00	20.69	C
ATOM	3225	C	VAL	A	409	11.118	5.538	40.642	1.00	21.47	C
ATOM	3226	O	VAL	A	409	11.487	4.672	41.418	1.00	23.58	O
ATOM	3227	CB	VAL	A	409	11.797	7.867	41.012	1.00	19.59	C
ATOM	3228	CG1	VAL	A	409	11.897	7.549	42.518	1.00	19.23	C
ATOM	3229	CG2	VAL	A	409	12.753	8.975	40.613	1.00	17.46	C
ATOM	3230	N	ARG	A	410	9.879	5.610	40.163	1.00	21.93	N
ATOM	3231	CA	ARG	A	410	8.889	4.593	40.488	1.00	21.95	C
ATOM	3232	C	ARG	A	410	9.369	3.263	39.930	1.00	21.48	C
ATOM	3233	O	ARG	A	410	9.723	2.363	40.692	1.00	24.94	O
ATOM	3234	CB	ARG	A	410	7.506	4.939	39.904	1.00	22.67	C
ATOM	3235	CG	ARG	A	410	6.846	6.205	40.445	1.00	20.28	C
ATOM	3236	CD	ARG	A	410	5.357	6.220	40.114	1.00	20.80	C
ATOM	3237	NE	ARG	A	410	4.733	7.522	40.365	1.00	20.80	N
ATOM	3238	CZ	ARG	A	410	3.487	7.841	40.011	1.00	20.59	C
ATOM	3239	NH1	ARG	A	410	2.705	6.941	39.426	1.00	21.04	N1+
ATOM	3240	NH2	ARG	A	410	3.025	9.067	40.234	1.00	20.07	N
ATOM	3241	N	TYR	A	411	9.529	3.186	38.615	1.00	18.76	N
ATOM	3242	CA	TYR	A	411	9.792	1.907	37.974	1.00	17.50	C
ATOM	3243	C	TYR	A	411	11.169	1.356	38.330	1.00	17.38	C
ATOM	3244	O	TYR	A	411	11.289	0.240	38.823	1.00	15.90	O
ATOM	3245	CB	TYR	A	411	9.606	2.024	36.453	1.00	18.41	C
ATOM	3246	CG	TYR	A	411	8.151	1.974	36.064	1.00	17.19	C
ATOM	3247	CD1	TYR	A	411	7.215	2.657	36.815	1.00	15.09	C
ATOM	3248	CD2	TYR	A	411	7.684	1.060	35.137	1.00	18.38	C
ATOM	3249	CE1	TYR	A	411	5.885	2.431	36.681	1.00	11.66	C
ATOM	3250	CE2	TYR	A	411	6.325	0.829	34.998	1.00	15.51	C
ATOM	3251	CZ	TYR	A	411	5.436	1.536	35.776	1.00	12.43	C
ATOM	3252	OH	TYR	A	411	4.079	1.476	35.573	1.00	16.59	O
ATOM	3253	N	THR	A	412	12.186	2.195	38.234	1.00	19.91	N
ATOM	3254	CA	THR	A	412	13.541	1.791	38.601	1.00	24.09	C
ATOM	3255	C	THR	A	412	13.591	1.176	39.988	1.00	23.32	C
ATOM	3256	O	THR	A	412	14.583	0.526	40.342	1.00	22.82	O
ATOM	3257	CB	THR	A	412	14.510	2.978	38.590	1.00	26.90	C
ATOM	3258	CG2	THR	A	412	15.900	2.514	38.214	1.00	29.28	C
ATOM	3259	OG1	THR	A	412	14.063	3.952	37.634	1.00	31.00	O
ATOM	3260	N	LYS	A	413	12.580	1.492	40.802	1.00	21.28	N
ATOM	3261	CA	LYS	A	413	12.512	1.006	42.170	1.00	19.27	C
ATOM	3262	C	LYS	A	413	11.796	-0.322	42.158	1.00	19.80	C
ATOM	3263	O	LYS	A	413	12.418	-1.382	42.340	1.00	20.91	O
ATOM	3264	CB	LYS	A	413	11.768	1.999	43.068	1.00	16.46	C
ATOM	3265	CG	LYS	A	413	12.670	2.713	44.084	1.00	17.32	C
ATOM	3266	CD	LYS	A	413	11.899	3.127	45.323	1.00	18.80	C
ATOM	3267	CE	LYS	A	413	11.409	4.570	45.242	1.00	21.30	C
ATOM	3268	NZ	LYS	A	413	12.515	5.551	45.015	1.00	20.06	N1+
ATOM	3269	N	LYS	A	414	10.531	-0.282	41.752	1.00	18.33	N
ATOM	3270	CA	LYS	A	414	9.678	-1.445	41.909	1.00	16.94	C
ATOM	3271	C	LYS	A	414	10.083	-2.597	41.015	1.00	17.20	C
ATOM	3272	O	LYS	A	414	9.744	-3.742	41.285	1.00	17.03	O
ATOM	3273	CB	LYS	A	414	8.192	-1.098	41.704	1.00	17.27	C
ATOM	3274	CG	LYS	A	414	7.823	-0.088	40.645	1.00	12.68	C
ATOM	3275	CD	LYS	A	414	6.341	-0.276	40.311	1.00	14.55	C
ATOM	3276	CE	LYS	A	414	5.798	0.739	39.303	1.00	14.56	C
ATOM	3277	NZ	LYS	A	414	5.337	2.037	39.917	1.00	14.02	N1+
ATOM	3278	N	VAL	A	415	10.934	-2.302	40.043	1.00	17.01	N
ATOM	3279	CA	VAL	A	415	11.369	-3.287	39.070	1.00	16.75	C
ATOM	3280	C	VAL	A	415	12.780	-2.914	38.581	1.00	21.86	C
ATOM	3281	O	VAL	A	415	12.949	-2.362	37.490	1.00	23.99	O
ATOM	3282	CB	VAL	A	415	10.373	-3.353	37.897	1.00	12.19	C
ATOM	3283	CG1	VAL	A	415	10.301	-2.032	37.199	1.00	10.88	C
ATOM	3284	CG2	VAL	A	415	10.754	-4.432	36.947	1.00	9.96	C
ATOM	3285	N	PRO	A	416	13.817	-3.194	39.401	1.00	23.73	N
ATOM	3286	CA	PRO	A	416	15.121	-2.556	39.239	1.00	23.14	C
ATOM	3287	C	PRO	A	416	16.129	-3.485	38.583	1.00	22.45	C
ATOM	3288	O	PRO	A	416	17.310	-3.467	38.920	1.00	20.59	O
ATOM	3289	CB	PRO	A	416	15.513	-2.221	40.679	1.00	26.64	C

ATOM	3290	CG	PRO	A	416	14.755	-3.262	41.552	1.00	24.34	C
ATOM	3291	CD	PRO	A	416	13.777	-3.984	40.645	1.00	25.02	C
ATOM	3292	N	GLN	A	417	15.653	-4.338	37.686	1.00	24.78	N
ATOM	3293	CA	GLN	A	417	16.554	-5.178	36.894	1.00	25.39	C
ATOM	3294	C	GLN	A	417	16.386	-5.115	35.367	1.00	25.68	C
ATOM	3295	O	GLN	A	417	17.256	-5.608	34.646	1.00	28.59	O
ATOM	3296	CB	GLN	A	417	16.476	-6.640	37.343	1.00	22.92	C
ATOM	3297	CG	GLN	A	417	17.445	-6.998	38.437	1.00	16.76	C
ATOM	3298	CD	GLN	A	417	16.729	-7.293	39.727	1.00	19.80	C
ATOM	3299	NE2	GLN	A	417	17.337	-8.118	40.561	1.00	17.72	N
ATOM	3300	OE1	GLN	A	417	15.618	-6.796	39.965	1.00	20.09	O
ATOM	3301	N	VAL	A	418	15.284	-4.562	34.862	1.00	23.83	N
ATOM	3302	CA	VAL	A	418	15.206	-4.262	33.420	1.00	25.79	C
ATOM	3303	C	VAL	A	418	16.443	-3.398	33.023	1.00	25.27	C
ATOM	3304	O	VAL	A	418	17.075	-2.784	33.886	1.00	26.72	O
ATOM	3305	CB	VAL	A	418	13.872	-3.506	33.057	1.00	24.98	C
ATOM	3306	CG1	VAL	A	418	13.516	-3.697	31.597	1.00	21.82	C
ATOM	3307	CG2	VAL	A	418	12.720	-4.010	33.907	1.00	25.57	C
ATOM	3308	N	SER	A	419	16.865	-3.451	31.761	1.00	23.89	N
ATOM	3309	CA	SER	A	419	18.115	-2.791	31.338	1.00	24.81	C
ATOM	3310	C	SER	A	419	18.045	-1.274	31.448	1.00	23.00	C
ATOM	3311	O	SER	A	419	17.072	-0.685	31.022	1.00	23.69	O
ATOM	3312	CB	SER	A	419	18.449	-3.159	29.888	1.00	25.20	C
ATOM	3313	OG	SER	A	419	18.798	-4.528	29.762	1.00	28.67	O
ATOM	3314	N	THR	A	420	19.130	-0.623	31.854	1.00	24.58	N
ATOM	3315	CA	THR	A	420	19.075	0.829	32.039	1.00	24.29	C
ATOM	3316	C	THR	A	420	18.501	1.555	30.855	1.00	24.81	C
ATOM	3317	O	THR	A	420	17.600	2.367	31.013	1.00	26.08	O
ATOM	3318	CB	THR	A	420	20.425	1.453	32.348	1.00	21.78	C
ATOM	3319	CG2	THR	A	420	20.375	2.953	32.130	1.00	21.26	C
ATOM	3320	OG1	THR	A	420	20.763	1.193	33.715	1.00	24.19	O
ATOM	3321	N	PRO	A	421	18.946	1.222	29.642	1.00	25.02	N
ATOM	3322	CA	PRO	A	421	18.193	1.830	28.545	1.00	26.98	C
ATOM	3323	C	PRO	A	421	16.704	1.458	28.629	1.00	27.18	C
ATOM	3324	O	PRO	A	421	15.850	2.349	28.768	1.00	25.10	O
ATOM	3325	CB	PRO	A	421	18.867	1.272	27.282	1.00	27.79	C
ATOM	3326	CG	PRO	A	421	19.758	0.135	27.777	1.00	29.44	C
ATOM	3327	CD	PRO	A	421	20.152	0.531	29.167	1.00	25.03	C
ATOM	3328	N	THR	A	422	16.427	0.149	28.728	1.00	26.36	N
ATOM	3329	CA	THR	A	422	15.064	-0.393	28.605	1.00	24.58	C
ATOM	3330	C	THR	A	422	14.162	0.069	29.744	1.00	24.87	C
ATOM	3331	O	THR	A	422	13.011	-0.349	29.839	1.00	27.96	O
ATOM	3332	CB	THR	A	422	15.058	-1.947	28.560	1.00	21.16	C
ATOM	3333	CG2	THR	A	422	13.682	-2.465	28.189	1.00	21.32	C
ATOM	3334	OG1	THR	A	422	15.985	-2.411	27.570	1.00	20.86	O
ATOM	3335	N	LEU	A	423	14.745	0.778	30.703	1.00	25.19	N
ATOM	3336	CA	LEU	A	423	13.976	1.651	31.558	1.00	22.20	C
ATOM	3337	C	LEU	A	423	13.860	2.946	30.755	1.00	22.66	C
ATOM	3338	O	LEU	A	423	12.860	3.113	30.062	1.00	22.77	O
ATOM	3339	CB	LEU	A	423	14.689	1.889	32.891	1.00	23.24	C
ATOM	3340	CG	LEU	A	423	14.626	0.885	34.065	1.00	22.20	C
ATOM	3341	CD1	LEU	A	423	13.289	0.159	34.098	1.00	19.45	C
ATOM	3342	CD2	LEU	A	423	15.788	-0.093	33.971	1.00	18.12	C
ATOM	3343	N	VAL	A	424	14.969	3.678	30.592	1.00	22.40	N
ATOM	3344	CA	VAL	A	424	14.941	5.007	29.944	1.00	19.48	C
ATOM	3345	C	VAL	A	424	14.315	5.097	28.554	1.00	21.48	C
ATOM	3346	O	VAL	A	424	14.119	6.211	28.067	1.00	23.47	O
ATOM	3347	CB	VAL	A	424	16.337	5.707	29.809	1.00	17.06	C
ATOM	3348	CG1	VAL	A	424	16.141	7.204	29.867	1.00	9.48	C
ATOM	3349	CG2	VAL	A	424	17.336	5.264	30.890	1.00	14.26	C
ATOM	3350	N	GLU	A	425	13.977	3.977	27.908	1.00	20.71	N
ATOM	3351	CA	GLU	A	425	13.114	4.076	26.724	1.00	20.21	C
ATOM	3352	C	GLU	A	425	11.679	4.209	27.187	1.00	21.09	C
ATOM	3353	O	GLU	A	425	10.983	5.151	26.790	1.00	22.27	O
ATOM	3354	CB	GLU	A	425	13.231	2.868	25.790	1.00	19.48	C
ATOM	3355	CG	GLU	A	425	13.577	3.210	24.334	1.00	17.47	C
ATOM	3356	CD	GLU	A	425	12.582	4.152	23.653	1.00	17.36	C
ATOM	3357	OE1	GLU	A	425	12.703	5.386	23.801	1.00	16.77	O
ATOM	3358	OE2	GLU	A	425	11.746	3.674	22.860	1.00	20.99	O1-
ATOM	3359	N	VAL	A	426	11.277	3.332	28.108	1.00	20.45	N
ATOM	3360	CA	VAL	A	426	9.940	3.379	28.710	1.00	18.52	C

ATOM	3361	C	VAL	A	426	9.831	4.594	29.631	1.00	17.11	C
ATOM	3362	O	VAL	A	426	9.014	5.466	29.407	1.00	19.30	O
ATOM	3363	CB	VAL	A	426	9.662	2.131	29.556	1.00	17.57	C
ATOM	3364	CG1	VAL	A	426	8.194	1.980	29.795	1.00	17.28	C
ATOM	3365	CG2	VAL	A	426	10.227	0.911	28.878	1.00	20.59	C
ATOM	3366	N	SER	A	427	10.693	4.664	30.635	1.00	14.13	N
ATOM	3367	CA	SER	A	427	10.598	5.670	31.676	1.00	14.17	C
ATOM	3368	C	SER	A	427	10.109	7.012	31.164	1.00	13.54	C
ATOM	3369	O	SER	A	427	9.024	7.432	31.522	1.00	11.17	O
ATOM	3370	CB	SER	A	427	11.950	5.834	32.356	1.00	17.92	C
ATOM	3371	OG	SER	A	427	12.541	4.586	32.668	1.00	14.61	O
ATOM	3372	N	ARG	A	428	10.786	7.547	30.152	1.00	15.97	N
ATOM	3373	CA	ARG	A	428	10.307	8.758	29.451	1.00	19.71	C
ATOM	3374	C	ARG	A	428	9.104	8.551	28.504	1.00	19.67	C
ATOM	3375	O	ARG	A	428	8.208	9.395	28.438	1.00	20.46	O
ATOM	3376	CB	ARG	A	428	11.447	9.463	28.679	1.00	17.27	C
ATOM	3377	CG	ARG	A	428	12.600	8.580	28.234	1.00	13.84	C
ATOM	3378	CD	ARG	A	428	13.345	9.187	27.075	1.00	12.03	C
ATOM	3379	NE	ARG	A	428	13.832	10.531	27.369	1.00	13.38	N
ATOM	3380	CZ	ARG	A	428	13.437	11.648	26.750	1.00	12.65	C
ATOM	3381	NH1	ARG	A	428	12.447	11.635	25.863	1.00	7.48	N1+
ATOM	3382	NH2	ARG	A	428	14.028	12.800	27.040	1.00	10.10	N
ATOM	3383	N	ASN	A	429	9.094	7.458	27.750	1.00	20.12	N
ATOM	3384	CA	ASN	A	429	7.972	7.177	26.876	1.00	20.34	C
ATOM	3385	C	ASN	A	429	6.612	7.140	27.579	1.00	20.43	C
ATOM	3386	O	ASN	A	429	5.772	7.993	27.303	1.00	23.09	O
ATOM	3387	CB	ASN	A	429	8.215	5.903	26.081	1.00	19.92	C
ATOM	3388	CG	ASN	A	429	8.527	6.196	24.626	1.00	23.69	C
ATOM	3389	ND2	ASN	A	429	9.313	7.253	24.394	1.00	24.44	N
ATOM	3390	OD1	ASN	A	429	7.988	5.552	23.716	1.00	23.46	O
ATOM	3391	N	LEU	A	430	6.418	6.233	28.542	1.00	18.98	N
ATOM	3392	CA	LEU	A	430	5.201	6.222	29.366	1.00	13.10	C
ATOM	3393	C	LEU	A	430	5.217	7.456	30.222	1.00	13.42	C
ATOM	3394	O	LEU	A	430	4.270	7.738	30.921	1.00	14.99	O
ATOM	3395	CB	LEU	A	430	5.120	4.968	30.239	1.00	7.34	C
ATOM	3396	CG	LEU	A	430	5.092	4.992	31.769	1.00	2.61	C
ATOM	3397	CD1	LEU	A	430	4.894	3.578	32.284	1.00	3.10	C
ATOM	3398	CD2	LEU	A	430	6.381	5.518	32.313	1.00	2.00	C
ATOM	3399	N	GLY	A	431	6.352	8.135	30.244	1.00	16.38	N
ATOM	3400	CA	GLY	A	431	6.351	9.513	30.682	1.00	17.97	C
ATOM	3401	C	GLY	A	431	5.371	10.263	29.810	1.00	17.99	C
ATOM	3402	O	GLY	A	431	4.290	10.586	30.285	1.00	20.37	O
ATOM	3403	N	LYS	A	432	5.621	10.252	28.499	1.00	16.66	N
ATOM	3404	CA	LYS	A	432	4.947	11.127	27.524	1.00	15.91	C
ATOM	3405	C	LYS	A	432	3.429	11.034	27.418	1.00	15.02	C
ATOM	3406	O	LYS	A	432	2.850	11.519	26.453	1.00	11.29	O
ATOM	3407	CB	LYS	A	432	5.525	10.900	26.135	1.00	16.80	C
ATOM	3408	CG	LYS	A	432	7.003	11.220	25.997	1.00	18.19	C
ATOM	3409	CD	LYS	A	432	7.359	11.418	24.526	1.00	19.26	C
ATOM	3410	CE	LYS	A	432	8.406	10.405	24.082	1.00	22.95	C
ATOM	3411	NZ	LYS	A	432	8.438	10.312	22.595	1.00	27.31	N1+
ATOM	3412	N	VAL	A	433	2.802	10.333	28.356	1.00	16.94	N
ATOM	3413	CA	VAL	A	433	1.353	10.328	28.507	1.00	15.68	C
ATOM	3414	C	VAL	A	433	0.985	11.622	29.194	1.00	14.62	C
ATOM	3415	O	VAL	A	433	0.140	12.354	28.707	1.00	18.83	O
ATOM	3416	CB	VAL	A	433	0.878	9.124	29.363	1.00	16.06	C
ATOM	3417	CG1	VAL	A	433	-0.188	9.552	30.376	1.00	15.00	C
ATOM	3418	CG2	VAL	A	433	0.367	8.019	28.463	1.00	10.29	C
ATOM	3419	N	GLY	A	434	1.701	11.967	30.251	1.00	13.40	N
ATOM	3420	CA	GLY	A	434	1.392	13.190	30.969	1.00	17.13	C
ATOM	3421	C	GLY	A	434	1.177	14.348	30.013	1.00	18.55	C
ATOM	3422	O	GLY	A	434	0.108	14.946	29.981	1.00	17.84	O
ATOM	3423	N	SER	A	435	2.091	14.472	29.063	1.00	20.65	N
ATOM	3424	CA	SER	A	435	2.031	15.533	28.073	1.00	21.99	C
ATOM	3425	C	SER	A	435	0.790	15.331	27.200	1.00	22.53	C
ATOM	3426	O	SER	A	435	-0.251	15.929	27.471	1.00	22.40	O
ATOM	3427	CB	SER	A	435	3.329	15.553	27.221	1.00	25.26	C
ATOM	3428	OG	SER	A	435	4.523	15.746	28.007	1.00	22.37	O
ATOM	3429	N	LYS	A	436	0.832	14.330	26.322	1.00	23.94	N
ATOM	3430	CA	LYS	A	436	-0.157	14.181	25.250	1.00	25.08	C
ATOM	3431	C	LYS	A	436	-1.528	13.626	25.661	1.00	24.18	C

ATOM	3432	O	LYS	A	436	-2.216	13.046	24.827	1.00	26.29	O
ATOM	3433	CB	LYS	A	436	0.410	13.295	24.120	1.00	27.26	C
ATOM	3434	CG	LYS	A	436	-0.211	13.540	22.713	1.00	29.66	C
ATOM	3435	CD	LYS	A	436	-0.836	12.276	22.091	1.00	28.08	C
ATOM	3436	CE	LYS	A	436	-2.362	12.442	21.910	1.00	28.14	C
ATOM	3437	NZ	LYS	A	436	-3.079	11.155	21.561	1.00	26.79	N1+
ATOM	3438	N	CYS	A	437	-1.959	13.825	26.903	1.00	22.66	N
ATOM	3439	CA	CYS	A	437	-3.299	13.371	27.287	1.00	22.80	C
ATOM	3440	C	CYS	A	437	-3.940	14.098	28.461	1.00	22.95	C
ATOM	3441	O	CYS	A	437	-5.118	14.394	28.420	1.00	23.92	O
ATOM	3442	CB	CYS	A	437	-3.317	11.854	27.520	1.00	19.38	C
ATOM	3443	SG	CYS	A	437	-3.502	10.914	25.959	1.00	24.98	S
ATOM	3444	N	CYS	A	438	-3.170	14.449	29.484	1.00	23.70	N
ATOM	3445	CA	CYS	A	438	-3.717	15.267	30.546	1.00	22.08	C
ATOM	3446	C	CYS	A	438	-4.216	16.551	29.900	1.00	23.11	C
ATOM	3447	O	CYS	A	438	-5.390	16.891	30.012	1.00	23.14	O
ATOM	3448	CB	CYS	A	438	-2.650	15.582	31.595	1.00	19.90	C
ATOM	3449	SG	CYS	A	438	-1.760	14.132	32.242	1.00	17.60	S
ATOM	3450	N	LYS	A	439	-3.378	17.119	29.037	1.00	25.03	N
ATOM	3451	CA	LYS	A	439	-3.676	18.377	28.346	1.00	25.75	C
ATOM	3452	C	LYS	A	439	-4.672	18.082	27.239	1.00	25.01	C
ATOM	3453	O	LYS	A	439	-4.405	18.336	26.059	1.00	22.62	O
ATOM	3454	CB	LYS	A	439	-2.385	18.981	27.761	1.00	27.02	C
ATOM	3455	CG	LYS	A	439	-2.044	20.364	28.297	1.00	26.58	C
ATOM	3456	CD	LYS	A	439	-0.569	20.490	28.681	1.00	25.12	C
ATOM	3457	CE	LYS	A	439	-0.261	21.909	29.205	1.00	26.40	C
ATOM	3458	NZ	LYS	A	439	1.186	22.172	29.539	1.00	24.08	N1+
ATOM	3459	N	HIS	A	440	-5.835	17.575	27.646	1.00	25.71	N
ATOM	3460	CA	HIS	A	440	-6.781	16.952	26.733	1.00	25.96	C
ATOM	3461	C	HIS	A	440	-8.119	16.494	27.332	1.00	26.52	C
ATOM	3462	O	HIS	A	440	-8.967	16.005	26.602	1.00	27.11	O
ATOM	3463	CB	HIS	A	440	-6.108	15.762	26.054	1.00	24.62	C
ATOM	3464	CG	HIS	A	440	-7.055	14.877	25.323	1.00	20.53	C
ATOM	3465	CD2	HIS	A	440	-7.449	13.606	25.559	1.00	20.18	C
ATOM	3466	ND1	HIS	A	440	-7.787	15.313	24.247	1.00	21.98	N
ATOM	3467	CE1	HIS	A	440	-8.575	14.341	23.830	1.00	22.57	C
ATOM	3468	NE2	HIS	A	440	-8.386	13.291	24.607	1.00	20.14	N
ATOM	3469	N	PRO	A	441	-8.400	16.840	28.595	1.00	28.45	N
ATOM	3470	CA	PRO	A	441	-9.107	15.970	29.553	1.00	30.20	C
ATOM	3471	C	PRO	A	441	-10.490	15.409	29.137	1.00	30.12	C
ATOM	3472	O	PRO	A	441	-10.683	15.001	27.984	1.00	28.70	O
ATOM	3473	CB	PRO	A	441	-9.202	16.838	30.811	1.00	32.36	C
ATOM	3474	CG	PRO	A	441	-9.186	18.258	30.292	1.00	32.89	C
ATOM	3475	CD	PRO	A	441	-8.282	18.229	29.090	1.00	30.04	C
ATOM	3476	N	GLU	A	442	-11.410	15.285	30.101	1.00	29.30	N
ATOM	3477	CA	GLU	A	442	-12.751	14.720	29.866	1.00	29.85	C
ATOM	3478	C	GLU	A	442	-12.863	13.169	29.936	1.00	28.51	C
ATOM	3479	O	GLU	A	442	-12.375	12.533	30.885	1.00	22.26	O
ATOM	3480	CB	GLU	A	442	-13.324	15.201	28.507	1.00	29.58	C
ATOM	3481	CG	GLU	A	442	-13.697	16.673	28.422	1.00	26.93	C
ATOM	3482	CD	GLU	A	442	-12.757	17.475	27.541	1.00	25.31	C
ATOM	3483	OE1	GLU	A	442	-11.572	17.123	27.442	1.00	20.53	O
ATOM	3484	OE2	GLU	A	442	-13.192	18.505	26.974	1.00	28.11	O1-
ATOM	3485	N	ALA	A	443	-13.822	12.669	29.147	1.00	27.70	N
ATOM	3486	CA	ALA	A	443	-13.825	11.304	28.638	1.00	26.01	C
ATOM	3487	C	ALA	A	443	-12.551	11.111	27.852	1.00	24.19	C
ATOM	3488	O	ALA	A	443	-11.639	10.447	28.316	1.00	26.28	O
ATOM	3489	CB	ALA	A	443	-15.016	11.089	27.708	1.00	26.77	C
ATOM	3490	N	LYS	A	444	-12.411	11.892	26.788	1.00	22.05	N
ATOM	3491	CA	LYS	A	444	-11.370	11.674	25.785	1.00	21.39	C
ATOM	3492	C	LYS	A	444	-10.000	11.321	26.357	1.00	20.82	C
ATOM	3493	O	LYS	A	444	-9.137	10.831	25.620	1.00	18.13	O
ATOM	3494	CB	LYS	A	444	-11.248	12.911	24.894	1.00	22.35	C
ATOM	3495	CG	LYS	A	444	-11.775	12.721	23.484	1.00	22.26	C
ATOM	3496	CD	LYS	A	444	-13.306	12.807	23.457	1.00	20.62	C
ATOM	3497	CE	LYS	A	444	-13.783	14.030	22.666	1.00	18.58	C
ATOM	3498	NZ	LYS	A	444	-13.011	15.272	22.977	1.00	15.81	N1+
ATOM	3499	N	ARG	A	445	-9.762	11.777	27.594	1.00	20.03	N
ATOM	3500	CA	ARG	A	445	-8.614	11.392	28.429	1.00	18.49	C
ATOM	3501	C	ARG	A	445	-8.397	9.892	28.555	1.00	19.53	C
ATOM	3502	O	ARG	A	445	-7.514	9.343	27.914	1.00	21.22	O

ATOM	3503	CB	ARG	A	445	-8.758	11.970	29.830	1.00	14.76	C
ATOM	3504	CG	ARG	A	445	-7.643	11.580	30.764	1.00	10.97	C
ATOM	3505	CD	ARG	A	445	-7.994	11.871	32.222	1.00	11.73	C
ATOM	3506	NE	ARG	A	445	-8.114	13.288	32.629	1.00	13.19	N
ATOM	3507	CZ	ARG	A	445	-7.458	14.336	32.122	1.00	9.58	C
ATOM	3508	NH1	ARG	A	445	-6.945	14.323	30.899	1.00	7.80	N1+
ATOM	3509	NH2	ARG	A	445	-7.497	15.482	32.775	1.00	6.22	N
ATOM	3510	N	MET	A	446	-9.204	9.204	29.348	1.00	20.28	N
ATOM	3511	CA	MET	A	446	-8.894	7.805	29.608	1.00	22.11	C
ATOM	3512	C	MET	A	446	-8.796	6.892	28.368	1.00	21.20	C
ATOM	3513	O	MET	A	446	-7.843	6.105	28.273	1.00	21.62	O
ATOM	3514	CB	MET	A	446	-9.830	7.188	30.659	1.00	22.74	C
ATOM	3515	CG	MET	A	446	-9.620	5.693	30.794	1.00	24.58	C
ATOM	3516	SD	MET	A	446	-9.860	4.949	32.408	1.00	28.20	S
ATOM	3517	CE	MET	A	446	-11.076	3.660	31.945	1.00	22.67	C
ATOM	3518	N	PRO	A	447	-9.733	6.979	27.405	1.00	20.32	N
ATOM	3519	CA	PRO	A	447	-9.574	6.042	26.294	1.00	22.10	C
ATOM	3520	C	PRO	A	447	-8.133	6.079	25.772	1.00	23.45	C
ATOM	3521	O	PRO	A	447	-7.541	5.014	25.563	1.00	25.75	O
ATOM	3522	CB	PRO	A	447	-10.578	6.532	25.234	1.00	21.91	C
ATOM	3523	CG	PRO	A	447	-11.561	7.311	25.970	1.00	20.33	C
ATOM	3524	CD	PRO	A	447	-10.792	7.962	27.113	1.00	22.51	C
ATOM	3525	N	CYS	A	448	-7.509	7.266	25.813	1.00	21.39	N
ATOM	3526	CA	CYS	A	448	-6.156	7.436	25.279	1.00	19.05	C
ATOM	3527	C	CYS	A	448	-5.183	6.767	26.222	1.00	18.85	C
ATOM	3528	O	CYS	A	448	-4.317	6.025	25.775	1.00	21.92	O
ATOM	3529	CB	CYS	A	448	-5.756	8.916	25.173	1.00	19.04	C
ATOM	3530	SG	CYS	A	448	-4.591	9.295	26.505	1.00	20.87	S
ATOM	3531	N	ALA	A	449	-5.386	6.971	27.527	1.00	17.31	N
ATOM	3532	CA	ALA	A	449	-4.314	6.924	28.522	1.00	13.97	C
ATOM	3533	C	ALA	A	449	-4.209	5.679	29.390	1.00	16.06	C
ATOM	3534	O	ALA	A	449	-3.241	5.544	30.100	1.00	20.40	O
ATOM	3535	CB	ALA	A	449	-4.376	8.142	29.409	1.00	10.09	C
ATOM	3536	N	GLU	A	450	-5.188	4.780	29.374	1.00	17.26	N
ATOM	3537	CA	GLU	A	450	-4.941	3.417	29.855	1.00	16.55	C
ATOM	3538	C	GLU	A	450	-4.304	2.693	28.672	1.00	18.65	C
ATOM	3539	O	GLU	A	450	-3.139	2.330	28.712	1.00	18.04	O
ATOM	3540	CB	GLU	A	450	-6.245	2.725	30.241	1.00	17.28	C
ATOM	3541	CG	GLU	A	450	-6.151	1.924	31.533	1.00	15.50	C
ATOM	3542	CD	GLU	A	450	-7.098	0.716	31.585	1.00	18.82	C
ATOM	3543	OE1	GLU	A	450	-8.213	0.768	31.027	1.00	17.57	O
ATOM	3544	OE2	GLU	A	450	-6.726	-0.310	32.195	1.00	21.24	O1-
ATOM	3545	N	ASP	A	451	-4.985	2.799	27.531	1.00	19.88	N
ATOM	3546	CA	ASP	A	451	-4.495	2.392	26.213	1.00	18.66	C
ATOM	3547	C	ASP	A	451	-3.055	2.711	25.815	1.00	18.58	C
ATOM	3548	O	ASP	A	451	-2.341	1.810	25.397	1.00	20.61	O
ATOM	3549	CB	ASP	A	451	-5.435	2.927	25.140	1.00	17.00	C
ATOM	3550	CG	ASP	A	451	-6.675	2.088	25.009	1.00	19.38	C
ATOM	3551	OD1	ASP	A	451	-6.556	0.869	25.262	1.00	16.86	O
ATOM	3552	OD2	ASP	A	451	-7.762	2.634	24.690	1.00	19.70	O1-
ATOM	3553	N	TYR	A	452	-2.658	3.981	25.827	1.00	16.13	N
ATOM	3554	CA	TYR	A	452	-1.281	4.344	25.489	1.00	15.08	C
ATOM	3555	C	TYR	A	452	-0.335	3.655	26.464	1.00	16.14	C
ATOM	3556	O	TYR	A	452	0.481	2.837	26.070	1.00	17.95	O
ATOM	3557	CB	TYR	A	452	-1.093	5.854	25.560	1.00	13.93	C
ATOM	3558	CG	TYR	A	452	0.277	6.331	25.144	1.00	15.16	C
ATOM	3559	CD1	TYR	A	452	1.381	6.207	25.995	1.00	13.94	C
ATOM	3560	CD2	TYR	A	452	0.463	6.960	23.919	1.00	15.41	C
ATOM	3561	CE1	TYR	A	452	2.634	6.698	25.624	1.00	13.09	C
ATOM	3562	CE2	TYR	A	452	1.706	7.450	23.550	1.00	15.00	C
ATOM	3563	CZ	TYR	A	452	2.779	7.318	24.401	1.00	12.67	C
ATOM	3564	OH	TYR	A	452	3.973	7.861	24.029	1.00	11.49	O
ATOM	3565	N	LEU	A	453	-0.498	3.931	27.751	1.00	16.23	N
ATOM	3566	CA	LEU	A	453	0.196	3.200	28.794	1.00	13.79	C
ATOM	3567	C	LEU	A	453	0.231	1.710	28.457	1.00	13.05	C
ATOM	3568	O	LEU	A	453	1.301	1.125	28.413	1.00	15.56	O
ATOM	3569	CB	LEU	A	453	-0.502	3.427	30.135	1.00	11.83	C
ATOM	3570	CG	LEU	A	453	0.131	4.454	31.073	1.00	13.55	C
ATOM	3571	CD1	LEU	A	453	-0.933	5.105	31.932	1.00	11.05	C
ATOM	3572	CD2	LEU	A	453	1.178	3.782	31.944	1.00	10.99	C
ATOM	3573	N	SER	A	454	-0.879	1.181	27.955	1.00	11.72	N

ATOM	3574	CA	SER	A	454	-0.980	-0.244	27.649	1.00	11.87	C
ATOM	3575	C	SER	A	454	-0.003	-0.699	26.557	1.00	12.13	C
ATOM	3576	O	SER	A	454	0.518	-1.825	26.598	1.00	8.69	O
ATOM	3577	CB	SER	A	454	-2.408	-0.605	27.220	1.00	14.00	C
ATOM	3578	OG	SER	A	454	-3.390	0.232	27.809	1.00	11.75	O
ATOM	3579	N	VAL	A	455	0.155	0.154	25.543	1.00	11.63	N
ATOM	3580	CA	VAL	A	455	1.107	-0.046	24.450	1.00	10.07	C
ATOM	3581	C	VAL	A	455	2.516	-0.105	25.015	1.00	11.00	C
ATOM	3582	O	VAL	A	455	3.288	-0.996	24.675	1.00	10.74	O
ATOM	3583	CB	VAL	A	455	1.075	1.128	23.425	1.00	11.18	C
ATOM	3584	CG1	VAL	A	455	2.127	0.913	22.352	1.00	10.50	C
ATOM	3585	CG2	VAL	A	455	-0.299	1.283	22.809	1.00	6.79	C
ATOM	3586	N	VAL	A	456	2.858	0.864	25.861	1.00	12.33	N
ATOM	3587	CA	VAL	A	456	4.227	1.008	26.324	1.00	15.30	C
ATOM	3588	C	VAL	A	456	4.669	-0.208	27.125	1.00	18.48	C
ATOM	3589	O	VAL	A	456	5.671	-0.858	26.797	1.00	21.87	O
ATOM	3590	CB	VAL	A	456	4.399	2.248	27.164	1.00	13.68	C
ATOM	3591	CG1	VAL	A	456	5.777	2.285	27.727	1.00	14.03	C
ATOM	3592	CG2	VAL	A	456	4.167	3.460	26.316	1.00	17.71	C
ATOM	3593	N	LEU	A	457	3.867	-0.585	28.110	1.00	18.16	N
ATOM	3594	CA	LEU	A	457	4.124	-1.806	28.837	1.00	17.51	C
ATOM	3595	C	LEU	A	457	4.406	-2.967	27.856	1.00	19.56	C
ATOM	3596	O	LEU	A	457	5.322	-3.758	28.077	1.00	23.05	O
ATOM	3597	CB	LEU	A	457	2.943	-2.096	29.782	1.00	14.10	C
ATOM	3598	CG	LEU	A	457	3.038	-1.457	31.183	1.00	10.11	C
ATOM	3599	CD1	LEU	A	457	3.844	-0.180	31.147	1.00	6.96	C
ATOM	3600	CD2	LEU	A	457	1.668	-1.183	31.723	1.00	6.91	C
ATOM	3601	N	ASN	A	458	3.820	-2.914	26.666	1.00	19.26	N
ATOM	3602	CA	ASN	A	458	4.044	-3.982	25.696	1.00	20.09	C
ATOM	3603	C	ASN	A	458	5.403	-3.848	25.054	1.00	20.20	C
ATOM	3604	O	ASN	A	458	6.144	-4.823	25.000	1.00	22.87	O
ATOM	3605	CB	ASN	A	458	2.967	-3.985	24.622	1.00	22.45	C
ATOM	3606	CG	ASN	A	458	3.165	-5.070	23.594	1.00	23.30	C
ATOM	3607	ND2	ASN	A	458	3.201	-4.665	22.348	1.00	27.57	N
ATOM	3608	OD1	ASN	A	458	3.122	-6.263	23.895	1.00	25.73	O
ATOM	3609	N	GLN	A	459	5.782	-2.627	24.683	1.00	18.71	N
ATOM	3610	CA	GLN	A	459	7.156	-2.341	24.284	1.00	16.79	C
ATOM	3611	C	GLN	A	459	8.104	-2.947	25.318	1.00	19.53	C
ATOM	3612	O	GLN	A	459	8.829	-3.897	25.000	1.00	20.10	O
ATOM	3613	CB	GLN	A	459	7.375	-0.850	24.212	1.00	16.06	C
ATOM	3614	CG	GLN	A	459	8.559	-0.451	23.411	1.00	19.00	C
ATOM	3615	CD	GLN	A	459	8.212	-0.265	21.970	1.00	18.86	C
ATOM	3616	NE2	GLN	A	459	7.618	0.865	21.647	1.00	18.61	N
ATOM	3617	OE1	GLN	A	459	8.431	-1.150	21.156	1.00	20.77	O
ATOM	3618	N	LEU	A	460	7.894	-2.591	26.591	1.00	19.18	N
ATOM	3619	CA	LEU	A	460	8.570	-3.248	27.725	1.00	17.82	C
ATOM	3620	C	LEU	A	460	8.632	-4.768	27.635	1.00	18.45	C
ATOM	3621	O	LEU	A	460	9.692	-5.338	27.877	1.00	21.46	O
ATOM	3622	CB	LEU	A	460	7.919	-2.860	29.063	1.00	15.63	C
ATOM	3623	CG	LEU	A	460	8.279	-3.617	30.355	1.00	14.04	C
ATOM	3624	CD1	LEU	A	460	9.785	-3.769	30.501	1.00	15.77	C
ATOM	3625	CD2	LEU	A	460	7.747	-2.867	31.555	1.00	12.12	C
ATOM	3626	N	CYS	A	461	7.513	-5.430	27.330	1.00	20.02	N
ATOM	3627	CA	CYS	A	461	7.470	-6.904	27.322	1.00	20.16	C
ATOM	3628	C	CYS	A	461	8.172	-7.527	26.121	1.00	21.18	C
ATOM	3629	O	CYS	A	461	8.929	-8.505	26.272	1.00	19.43	O
ATOM	3630	CB	CYS	A	461	6.028	-7.408	27.348	1.00	17.64	C
ATOM	3631	SG	CYS	A	461	5.081	-6.878	28.795	1.00	17.61	S
ATOM	3632	N	VAL	A	462	7.942	-6.920	24.950	1.00	21.46	N
ATOM	3633	CA	VAL	A	462	8.437	-7.401	23.660	1.00	22.27	C
ATOM	3634	C	VAL	A	462	9.942	-7.136	23.468	1.00	23.83	C
ATOM	3635	O	VAL	A	462	10.679	-7.973	22.924	1.00	22.80	O
ATOM	3636	CB	VAL	A	462	7.672	-6.738	22.517	1.00	20.37	C
ATOM	3637	CG1	VAL	A	462	6.179	-6.891	22.734	1.00	20.18	C
ATOM	3638	CG2	VAL	A	462	8.039	-5.304	22.420	1.00	17.82	C
ATOM	3639	N	LEU	A	463	10.358	-5.933	23.863	1.00	24.45	N
ATOM	3640	CA	LEU	A	463	11.749	-5.617	24.183	1.00	23.28	C
ATOM	3641	C	LEU	A	463	12.444	-6.794	24.843	1.00	23.88	C
ATOM	3642	O	LEU	A	463	13.285	-7.448	24.233	1.00	25.91	O
ATOM	3643	CB	LEU	A	463	11.800	-4.420	25.144	1.00	20.02	C
ATOM	3644	CG	LEU	A	463	12.855	-3.340	24.952	1.00	16.71	C

ATOM	3645	CD1	LEU	A	463	13.665	-3.676	23.734	1.00	14.34	C
ATOM	3646	CD2	LEU	A	463	12.196	-1.970	24.804	1.00	15.27	C
ATOM	3647	N	HIS	A	464	12.115	-7.035	26.106	1.00	25.21	N
ATOM	3648	CA	HIS	A	464	12.941	-7.887	26.951	1.00	27.10	C
ATOM	3649	C	HIS	A	464	12.269	-9.220	27.310	1.00	25.73	C
ATOM	3650	O	HIS	A	464	11.668	-9.364	28.380	1.00	26.56	O
ATOM	3651	CB	HIS	A	464	13.392	-7.121	28.224	1.00	27.53	C
ATOM	3652	CG	HIS	A	464	14.883	-7.158	28.474	1.00	26.94	C
ATOM	3653	CD2	HIS	A	464	15.904	-7.678	27.738	1.00	21.05	C
ATOM	3654	ND1	HIS	A	464	15.464	-6.665	29.625	1.00	24.27	N
ATOM	3655	CE1	HIS	A	464	16.764	-6.892	29.600	1.00	20.67	C
ATOM	3656	NE2	HIS	A	464	17.053	-7.502	28.464	1.00	17.48	N
ATOM	3657	N	GLU	A	465	12.180	-10.082	26.305	1.00	23.46	N
ATOM	3658	CA	GLU	A	465	12.280	-11.518	26.492	1.00	21.43	C
ATOM	3659	C	GLU	A	465	13.764	-11.787	26.213	1.00	21.62	C
ATOM	3660	O	GLU	A	465	14.509	-12.216	27.092	1.00	20.90	O
ATOM	3661	CB	GLU	A	465	11.406	-12.258	25.458	1.00	23.62	C
ATOM	3662	CG	GLU	A	465	9.867	-12.214	25.681	1.00	20.17	C
ATOM	3663	CD	GLU	A	465	9.063	-12.794	24.503	1.00	18.19	C
ATOM	3664	OE1	GLU	A	465	8.978	-12.111	23.465	1.00	15.65	O
ATOM	3665	OE2	GLU	A	465	8.455	-13.888	24.626	1.00	15.39	O1-
ATOM	3666	N	LYS	A	466	14.199	-11.367	25.024	1.00	22.56	N
ATOM	3667	CA	LYS	A	466	15.611	-11.327	24.604	1.00	24.39	C
ATOM	3668	C	LYS	A	466	16.664	-11.640	25.685	1.00	21.61	C
ATOM	3669	O	LYS	A	466	17.404	-12.606	25.542	1.00	22.78	O
ATOM	3670	CB	LYS	A	466	15.899	-9.967	23.918	1.00	26.20	C
ATOM	3671	CG	LYS	A	466	17.381	-9.571	23.804	1.00	27.48	C
ATOM	3672	CD	LYS	A	466	17.668	-8.239	24.520	1.00	26.14	C
ATOM	3673	CE	LYS	A	466	19.123	-7.796	24.343	1.00	23.78	C
ATOM	3674	NZ	LYS	A	466	20.084	-8.644	25.115	1.00	20.55	N1+
ATOM	3675	N	THR	A	467	16.826	-10.776	26.681	1.00	19.96	N
ATOM	3676	CA	THR	A	467	17.514	-11.183	27.914	1.00	22.51	C
ATOM	3677	C	THR	A	467	16.397	-11.294	28.923	1.00	25.70	C
ATOM	3678	O	THR	A	467	15.585	-10.359	29.041	1.00	29.10	O
ATOM	3679	CB	THR	A	467	18.489	-10.112	28.487	1.00	16.74	C
ATOM	3680	CG2	THR	A	467	19.829	-10.712	28.809	1.00	14.95	C
ATOM	3681	OG1	THR	A	467	18.653	-9.056	27.550	1.00	14.94	O
ATOM	3682	N	PRO	A	468	16.405	-12.344	29.752	1.00	25.15	N
ATOM	3683	CA	PRO	A	468	15.248	-12.352	30.645	1.00	26.23	C
ATOM	3684	C	PRO	A	468	15.654	-11.886	32.035	1.00	25.34	C
ATOM	3685	O	PRO	A	468	16.667	-12.324	32.567	1.00	24.12	O
ATOM	3686	CB	PRO	A	468	14.786	-13.809	30.609	1.00	27.92	C
ATOM	3687	CG	PRO	A	468	15.621	-14.461	29.496	1.00	26.78	C
ATOM	3688	CD	PRO	A	468	16.904	-13.702	29.528	1.00	23.56	C
ATOM	3689	N	VAL	A	469	14.900	-10.945	32.589	1.00	26.09	N
ATOM	3690	CA	VAL	A	469	15.269	-10.322	33.863	1.00	26.57	C
ATOM	3691	C	VAL	A	469	14.259	-10.507	35.043	1.00	26.29	C
ATOM	3692	O	VAL	A	469	14.272	-11.537	35.720	1.00	25.05	O
ATOM	3693	CB	VAL	A	469	15.609	-8.808	33.643	1.00	25.96	C
ATOM	3694	CG1	VAL	A	469	17.067	-8.663	33.262	1.00	23.63	C
ATOM	3695	CG2	VAL	A	469	14.723	-8.211	32.541	1.00	22.41	C
ATOM	3696	N	SER	A	470	13.398	-9.520	35.283	1.00	24.94	N
ATOM	3697	CA	SER	A	470	12.584	-9.486	36.492	1.00	25.10	C
ATOM	3698	C	SER	A	470	11.436	-10.470	36.378	1.00	26.22	C
ATOM	3699	O	SER	A	470	10.438	-10.196	35.697	1.00	27.50	O
ATOM	3700	CB	SER	A	470	12.021	-8.070	36.744	1.00	24.74	C
ATOM	3701	OG	SER	A	470	11.640	-7.884	38.110	1.00	22.77	O
ATOM	3702	N	ASP	A	471	11.516	-11.553	37.145	1.00	25.67	N
ATOM	3703	CA	ASP	A	471	10.504	-12.596	37.091	1.00	25.01	C
ATOM	3704	C	ASP	A	471	9.126	-11.976	37.245	1.00	26.17	C
ATOM	3705	O	ASP	A	471	8.146	-12.438	36.640	1.00	27.11	O
ATOM	3706	CB	ASP	A	471	10.765	-13.620	38.175	1.00	23.33	C
ATOM	3707	CG	ASP	A	471	12.078	-14.320	37.978	1.00	25.27	C
ATOM	3708	OD1	ASP	A	471	13.125	-13.757	38.359	1.00	29.79	O
ATOM	3709	OD2	ASP	A	471	12.086	-15.384	37.335	1.00	29.40	O1-
ATOM	3710	N	ARG	A	472	9.108	-10.793	37.853	1.00	25.75	N
ATOM	3711	CA	ARG	A	472	7.884	-10.014	37.949	1.00	26.02	C
ATOM	3712	C	ARG	A	472	7.420	-9.534	36.583	1.00	26.00	C
ATOM	3713	O	ARG	A	472	6.279	-9.785	36.182	1.00	26.81	O
ATOM	3714	CB	ARG	A	472	8.098	-8.836	38.897	1.00	25.19	C
ATOM	3715	CG	ARG	A	472	8.527	-9.296	40.283	1.00	24.67	C

ATOM	3716	CD	ARG	A	472	7.413	-9.145	41.277	1.00	20.81	C
ATOM	3717	NE	ARG	A	472	7.918	-8.558	42.510	1.00	15.73	N
ATOM	3718	CZ	ARG	A	472	7.177	-7.901	43.390	1.00	15.03	C
ATOM	3719	NH1	ARG	A	472	5.946	-7.542	43.087	1.00	15.14	N1+
ATOM	3720	NH2	ARG	A	472	7.720	-7.494	44.523	1.00	16.85	N
ATOM	3721	N	VAL	A	473	8.323	-8.888	35.853	1.00	24.83	N
ATOM	3722	CA	VAL	A	473	8.029	-8.415	34.512	1.00	23.45	C
ATOM	3723	C	VAL	A	473	7.641	-9.624	33.669	1.00	22.85	C
ATOM	3724	O	VAL	A	473	6.743	-9.554	32.840	1.00	22.94	O
ATOM	3725	CB	VAL	A	473	9.259	-7.717	33.873	1.00	25.33	C
ATOM	3726	CG1	VAL	A	473	8.869	-7.093	32.530	1.00	23.20	C
ATOM	3727	CG2	VAL	A	473	9.845	-6.670	34.828	1.00	19.55	C
ATOM	3728	N	THR	A	474	8.260	-10.755	33.947	1.00	21.09	N
ATOM	3729	CA	THR	A	474	7.847	-11.976	33.298	1.00	24.95	C
ATOM	3730	C	THR	A	474	6.372	-12.199	33.594	1.00	25.61	C
ATOM	3731	O	THR	A	474	5.565	-12.398	32.675	1.00	27.28	O
ATOM	3732	CB	THR	A	474	8.647	-13.169	33.829	1.00	27.15	C
ATOM	3733	CG2	THR	A	474	8.638	-14.329	32.811	1.00	28.51	C
ATOM	3734	OG1	THR	A	474	9.997	-12.748	34.084	1.00	29.10	O
ATOM	3735	N	LYS	A	475	6.000	-12.011	34.856	1.00	26.00	N
ATOM	3736	CA	LYS	A	475	4.657	-12.344	35.320	1.00	24.30	C
ATOM	3737	C	LYS	A	475	3.533	-11.428	34.798	1.00	21.93	C
ATOM	3738	O	LYS	A	475	2.528	-11.951	34.305	1.00	20.33	O
ATOM	3739	CB	LYS	A	475	4.636	-12.427	36.858	1.00	25.66	C
ATOM	3740	CG	LYS	A	475	4.745	-13.872	37.436	1.00	27.40	C
ATOM	3741	CD	LYS	A	475	6.131	-14.541	37.206	1.00	29.53	C
ATOM	3742	CE	LYS	A	475	6.706	-15.275	38.468	1.00	27.50	C
ATOM	3743	NZ	LYS	A	475	7.235	-14.367	39.560	1.00	20.78	N1+
ATOM	3744	N	CYS	A	476	3.730	-10.098	34.805	1.00	18.81	N
ATOM	3745	CA	CYS	A	476	2.672	-9.129	34.411	1.00	14.74	C
ATOM	3746	C	CYS	A	476	2.446	-9.020	32.891	1.00	14.14	C
ATOM	3747	O	CYS	A	476	1.340	-8.728	32.413	1.00	10.01	O
ATOM	3748	CB	CYS	A	476	2.973	-7.735	34.969	1.00	14.71	C
ATOM	3749	SG	CYS	A	476	2.665	-7.476	36.756	1.00	17.94	S
ATOM	3750	N	CYS	A	477	3.502	-9.291	32.135	1.00	14.05	N
ATOM	3751	CA	CYS	A	477	3.383	-9.530	30.702	1.00	12.13	C
ATOM	3752	C	CYS	A	477	2.553	-10.798	30.380	1.00	11.06	C
ATOM	3753	O	CYS	A	477	1.395	-10.686	29.966	1.00	6.49	O
ATOM	3754	CB	CYS	A	477	4.794	-9.588	30.090	1.00	13.42	C
ATOM	3755	SG	CYS	A	477	5.744	-8.034	30.324	1.00	14.64	S
ATOM	3756	N	THR	A	478	3.070	-11.969	30.755	1.00	11.58	N
ATOM	3757	CA	THR	A	478	2.425	-13.263	30.481	1.00	14.89	C
ATOM	3758	C	THR	A	478	1.027	-13.474	31.033	1.00	15.80	C
ATOM	3759	O	THR	A	478	0.194	-14.100	30.369	1.00	16.44	O
ATOM	3760	CB	THR	A	478	3.241	-14.447	31.035	1.00	18.24	C
ATOM	3761	CG2	THR	A	478	3.479	-14.300	32.546	1.00	16.23	C
ATOM	3762	OG1	THR	A	478	2.514	-15.661	30.807	1.00	19.21	O
ATOM	3763	N	GLU	A	479	0.903	-13.261	32.343	1.00	15.82	N
ATOM	3764	CA	GLU	A	479	-0.286	-13.641	33.070	1.00	18.03	C
ATOM	3765	C	GLU	A	479	-1.524	-12.993	32.455	1.00	19.17	C
ATOM	3766	O	GLU	A	479	-2.474	-13.703	32.167	1.00	20.64	O
ATOM	3767	CB	GLU	A	479	-0.144	-13.319	34.572	1.00	20.48	C
ATOM	3768	CG	GLU	A	479	0.926	-14.185	35.346	1.00	25.02	C
ATOM	3769	CD	GLU	A	479	0.428	-15.556	35.910	1.00	26.36	C
ATOM	3770	OE1	GLU	A	479	-0.438	-15.569	36.819	1.00	27.61	O
ATOM	3771	OE2	GLU	A	479	1.014	-16.614	35.558	1.00	23.89	O1-
ATOM	3772	N	SER	A	480	-1.476	-11.697	32.129	1.00	21.19	N
ATOM	3773	CA	SER	A	480	-2.479	-11.102	31.229	1.00	23.00	C
ATOM	3774	C	SER	A	480	-2.032	-9.944	30.320	1.00	22.37	C
ATOM	3775	O	SER	A	480	-1.343	-9.022	30.768	1.00	23.67	O
ATOM	3776	CB	SER	A	480	-3.703	-10.633	32.019	1.00	25.73	C
ATOM	3777	OG	SER	A	480	-4.717	-10.096	31.159	1.00	24.90	O
ATOM	3778	N	LEU	A	481	-2.642	-9.900	29.133	1.00	18.32	N
ATOM	3779	CA	LEU	A	481	-2.721	-8.692	28.306	1.00	17.04	C
ATOM	3780	C	LEU	A	481	-3.581	-7.681	29.029	1.00	16.84	C
ATOM	3781	O	LEU	A	481	-3.162	-6.563	29.292	1.00	16.88	O
ATOM	3782	CB	LEU	A	481	-3.392	-8.992	26.950	1.00	12.89	C
ATOM	3783	CG	LEU	A	481	-3.438	-7.943	25.831	1.00	8.60	C
ATOM	3784	CD1	LEU	A	481	-2.107	-7.944	25.173	1.00	11.20	C
ATOM	3785	CD2	LEU	A	481	-4.510	-8.235	24.771	1.00	2.00	C
ATOM	3786	N	VAL	A	482	-4.791	-8.109	29.364	1.00	18.70	N

ATOM	3787	CA	VAL	A	482	-5.873	-7.205	29.741	1.00	17.38	C
ATOM	3788	C	VAL	A	482	-5.656	-6.631	31.146	1.00	15.41	C
ATOM	3789	O	VAL	A	482	-6.034	-5.490	31.420	1.00	12.39	O
ATOM	3790	CB	VAL	A	482	-7.235	-7.944	29.665	1.00	19.15	C
ATOM	3791	CG1	VAL	A	482	-8.371	-6.944	29.602	1.00	16.59	C
ATOM	3792	CG2	VAL	A	482	-7.262	-8.910	28.452	1.00	14.21	C
ATOM	3793	N	ASN	A	483	-4.887	-7.349	31.962	1.00	15.51	N
ATOM	3794	CA	ASN	A	483	-4.543	-6.871	33.313	1.00	19.45	C
ATOM	3795	C	ASN	A	483	-3.117	-6.282	33.448	1.00	18.86	C
ATOM	3796	O	ASN	A	483	-2.541	-6.286	34.527	1.00	18.09	O
ATOM	3797	CB	ASN	A	483	-4.744	-7.999	34.349	1.00	20.35	C
ATOM	3798	CG	ASN	A	483	-6.101	-8.689	34.212	1.00	23.29	C
ATOM	3799	ND2	ASN	A	483	-7.134	-8.065	34.770	1.00	23.14	N
ATOM	3800	OD1	ASN	A	483	-6.232	-9.728	33.544	1.00	20.79	O
ATOM	3801	N	ARG	A	484	-2.627	-5.632	32.400	1.00	19.94	N
ATOM	3802	CA	ARG	A	484	-1.235	-5.195	32.348	1.00	18.62	C
ATOM	3803	C	ARG	A	484	-1.091	-4.010	33.255	1.00	16.95	C
ATOM	3804	O	ARG	A	484	-0.397	-4.077	34.247	1.00	15.09	O
ATOM	3805	CB	ARG	A	484	-0.844	-4.773	30.920	1.00	22.74	C
ATOM	3806	CG	ARG	A	484	0.231	-5.615	30.212	1.00	18.99	C
ATOM	3807	CD	ARG	A	484	0.209	-5.384	28.687	1.00	16.43	C
ATOM	3808	NE	ARG	A	484	1.293	-6.102	28.008	1.00	17.41	N
ATOM	3809	CZ	ARG	A	484	1.157	-7.231	27.313	1.00	16.27	C
ATOM	3810	NH1	ARG	A	484	-0.025	-7.784	27.149	1.00	17.18	N1+
ATOM	3811	NH2	ARG	A	484	2.216	-7.812	26.767	1.00	20.22	N
ATOM	3812	N	ARG	A	485	-1.868	-2.973	32.992	1.00	17.31	N
ATOM	3813	CA	ARG	A	485	-1.641	-1.679	33.626	1.00	19.94	C
ATOM	3814	C	ARG	A	485	-2.259	-1.408	35.051	1.00	22.79	C
ATOM	3815	O	ARG	A	485	-1.991	-0.351	35.670	1.00	22.25	O
ATOM	3816	CB	ARG	A	485	-2.043	-0.583	32.637	1.00	16.29	C
ATOM	3817	CG	ARG	A	485	-1.603	0.799	33.039	1.00	16.70	C
ATOM	3818	CD	ARG	A	485	-2.801	1.708	33.276	1.00	15.57	C
ATOM	3819	NE	ARG	A	485	-3.930	1.020	33.887	1.00	12.17	N
ATOM	3820	CZ	ARG	A	485	-4.215	1.091	35.173	1.00	11.81	N
ATOM	3821	NH1	ARG	A	485	-3.411	1.751	35.978	1.00	15.13	N1+
ATOM	3822	NH2	ARG	A	485	-5.192	0.371	35.680	1.00	12.58	N
ATOM	3823	N	PRO	A	486	-3.067	-2.350	35.598	1.00	22.59	N
ATOM	3824	CA	PRO	A	486	-3.024	-2.488	37.067	1.00	23.53	C
ATOM	3825	C	PRO	A	486	-2.092	-3.558	37.639	1.00	21.48	C
ATOM	3826	O	PRO	A	486	-2.263	-3.997	38.779	1.00	18.78	O
ATOM	3827	CB	PRO	A	486	-4.489	-2.756	37.448	1.00	23.69	C
ATOM	3828	CG	PRO	A	486	-5.101	-3.264	36.224	1.00	19.85	C
ATOM	3829	CD	PRO	A	486	-4.446	-2.530	35.110	1.00	22.51	C
ATOM	3830	N	CYS	A	487	-1.118	-3.982	36.846	1.00	19.53	N
ATOM	3831	CA	CYS	A	487	-0.170	-4.986	37.304	1.00	19.20	C
ATOM	3832	C	CYS	A	487	1.135	-4.343	37.720	1.00	20.85	C
ATOM	3833	O	CYS	A	487	1.389	-4.179	38.908	1.00	24.17	O
ATOM	3834	CB	CYS	A	487	0.102	-6.004	36.223	1.00	15.12	C
ATOM	3835	SG	CYS	A	487	0.659	-7.543	36.947	1.00	12.46	S
ATOM	3836	N	PHE	A	488	1.882	-3.834	36.745	1.00	21.06	N
ATOM	3837	CA	PHE	A	488	3.057	-3.030	37.018	1.00	16.19	C
ATOM	3838	C	PHE	A	488	2.761	-2.078	38.133	1.00	16.14	C
ATOM	3839	O	PHE	A	488	3.334	-2.231	39.193	1.00	16.21	O
ATOM	3840	CB	PHE	A	488	3.487	-2.282	35.767	1.00	15.68	C
ATOM	3841	CG	PHE	A	488	4.434	-3.072	34.917	1.00	18.17	C
ATOM	3842	CD1	PHE	A	488	3.953	-4.049	34.066	1.00	14.32	C
ATOM	3843	CD2	PHE	A	488	5.800	-3.027	35.173	1.00	15.88	C
ATOM	3844	CE1	PHE	A	488	4.799	-4.961	33.530	1.00	13.05	C
ATOM	3845	CE2	PHE	A	488	6.638	-3.937	34.632	1.00	7.89	C
ATOM	3846	CZ	PHE	A	488	6.142	-4.907	33.821	1.00	11.30	C
ATOM	3847	N	SER	A	489	1.648	-1.356	37.989	1.00	16.65	N
ATOM	3848	CA	SER	A	489	1.124	-0.449	39.020	1.00	14.57	C
ATOM	3849	C	SER	A	489	1.020	-1.124	40.400	1.00	14.49	C
ATOM	3850	O	SER	A	489	1.604	-0.644	41.368	1.00	14.95	O
ATOM	3851	CB	SER	A	489	-0.261	0.084	38.606	1.00	13.40	C
ATOM	3852	OG	SER	A	489	-0.220	0.832	37.402	1.00	9.27	O
ATOM	3853	N	ALA	A	490	0.329	-2.264	40.471	1.00	14.36	N
ATOM	3854	CA	ALA	A	490	0.018	-2.922	41.746	1.00	14.42	C
ATOM	3855	C	ALA	A	490	1.174	-3.786	42.177	1.00	15.92	C
ATOM	3856	O	ALA	A	490	1.016	-4.996	42.395	1.00	16.03	O
ATOM	3857	CB	ALA	A	490	-1.233	-3.764	41.628	1.00	14.31	C

ATOM	3858	N	LEU	A	491	2.275	-3.111	42.483	1.00	16.50	N
ATOM	3859	CA	LEU	A	491	3.582	-3.730	42.630	1.00	17.68	C
ATOM	3860	C	LEU	A	491	4.264	-2.722	43.515	1.00	18.16	C
ATOM	3861	O	LEU	A	491	4.181	-1.532	43.235	1.00	19.45	O
ATOM	3862	CB	LEU	A	491	4.274	-3.755	41.260	1.00	18.42	C
ATOM	3863	CG	LEU	A	491	5.176	-4.844	40.673	1.00	19.23	C
ATOM	3864	CD1	LEU	A	491	4.410	-6.103	40.303	1.00	19.20	C
ATOM	3865	CD2	LEU	A	491	5.816	-4.257	39.436	1.00	21.21	C
ATOM	3866	N	GLU	A	492	4.742	-3.138	44.677	1.00	17.64	N
ATOM	3867	CA	GLU	A	492	5.441	-2.176	45.526	1.00	20.34	C
ATOM	3868	C	GLU	A	492	6.920	-2.316	45.191	1.00	20.14	C
ATOM	3869	O	GLU	A	492	7.255	-2.927	44.186	1.00	18.77	O
ATOM	3870	CB	GLU	A	492	5.143	-2.414	47.033	1.00	20.09	C
ATOM	3871	CG	GLU	A	492	3.620	-2.630	47.374	1.00	24.17	C
ATOM	3872	CD	GLU	A	492	2.836	-1.411	47.983	1.00	25.80	C
ATOM	3873	OE1	GLU	A	492	3.305	-0.784	48.959	1.00	27.22	O
ATOM	3874	OE2	GLU	A	492	1.648	-1.216	47.614	1.00	24.48	O1-
ATOM	3875	N	VAL	A	493	7.786	-1.623	45.924	1.00	21.53	N
ATOM	3876	CA	VAL	A	493	9.231	-1.795	45.779	1.00	20.93	C
ATOM	3877	C	VAL	A	493	9.635	-3.247	46.044	1.00	22.35	C
ATOM	3878	O	VAL	A	493	9.525	-3.722	47.170	1.00	24.31	O
ATOM	3879	CB	VAL	A	493	9.982	-0.910	46.767	1.00	18.51	C
ATOM	3880	CG1	VAL	A	493	11.487	-1.196	46.692	1.00	19.04	C
ATOM	3881	CG2	VAL	A	493	9.666	0.552	46.492	1.00	17.43	C
ATOM	3882	N	ASP	A	494	10.093	-3.951	45.016	1.00	24.29	N
ATOM	3883	CA	ASP	A	494	10.404	-5.382	45.148	1.00	25.27	C
ATOM	3884	C	ASP	A	494	11.691	-5.486	45.946	1.00	23.84	C
ATOM	3885	O	ASP	A	494	12.763	-5.666	45.375	1.00	22.03	O
ATOM	3886	CB	ASP	A	494	10.603	-6.067	43.764	1.00	25.69	C
ATOM	3887	CG	ASP	A	494	9.375	-5.952	42.826	1.00	21.60	C
ATOM	3888	OD1	ASP	A	494	8.405	-5.219	43.111	1.00	20.70	O
ATOM	3889	OD2	ASP	A	494	9.391	-6.593	41.768	1.00	16.55	O1-
ATOM	3890	N	GLU	A	495	11.558	-5.460	47.270	1.00	24.75	N
ATOM	3891	CA	GLU	A	495	12.703	-5.461	48.188	1.00	25.22	C
ATOM	3892	C	GLU	A	495	13.578	-6.701	48.020	1.00	25.09	C
ATOM	3893	O	GLU	A	495	14.671	-6.793	48.586	1.00	23.87	O
ATOM	3894	CB	GLU	A	495	12.229	-5.334	49.644	1.00	25.31	C
ATOM	3895	CG	GLU	A	495	11.358	-4.089	49.951	1.00	22.81	C
ATOM	3896	CD	GLU	A	495	9.976	-4.443	50.509	1.00	23.79	C
ATOM	3897	OE1	GLU	A	495	9.639	-5.650	50.564	1.00	20.96	O
ATOM	3898	OE2	GLU	A	495	9.223	-3.511	50.885	1.00	22.17	O1-
ATOM	3899	N	THR	A	496	13.107	-7.595	47.149	1.00	26.34	N
ATOM	3900	CA	THR	A	496	13.866	-8.694	46.535	1.00	23.22	C
ATOM	3901	C	THR	A	496	15.335	-8.416	46.231	1.00	22.62	C
ATOM	3902	O	THR	A	496	16.150	-9.331	46.277	1.00	22.94	O
ATOM	3903	CB	THR	A	496	13.187	-9.146	45.199	1.00	21.63	C
ATOM	3904	CG2	THR	A	496	12.732	-10.581	45.296	1.00	21.18	C
ATOM	3905	OG1	THR	A	496	12.060	-8.302	44.898	1.00	16.30	O
ATOM	3906	N	TYR	A	497	15.661	-7.150	45.975	1.00	22.20	N
ATOM	3907	CA	TYR	A	497	16.844	-6.768	45.215	1.00	23.14	C
ATOM	3908	C	TYR	A	497	18.148	-7.505	45.559	1.00	25.54	C
ATOM	3909	O	TYR	A	497	18.420	-8.588	45.015	1.00	24.48	O
ATOM	3910	CB	TYR	A	497	17.055	-5.256	45.330	1.00	23.83	C
ATOM	3911	CG	TYR	A	497	17.784	-4.607	44.155	1.00	25.67	C
ATOM	3912	CD1	TYR	A	497	17.903	-5.248	42.939	1.00	26.17	C
ATOM	3913	CD2	TYR	A	497	18.419	-3.381	44.302	1.00	24.70	C
ATOM	3914	CE1	TYR	A	497	18.656	-4.699	41.917	1.00	27.56	C
ATOM	3915	CE2	TYR	A	497	19.163	-2.831	43.293	1.00	24.84	C
ATOM	3916	CZ	TYR	A	497	19.298	-3.496	42.103	1.00	27.12	C
ATOM	3917	OH	TYR	A	497	20.187	-3.028	41.144	1.00	25.38	O
ATOM	3918	N	VAL	A	498	18.915	-6.947	46.504	1.00	26.48	N
ATOM	3919	CA	VAL	A	498	20.386	-7.050	46.515	1.00	25.76	C
ATOM	3920	C	VAL	A	498	20.815	-6.909	45.059	1.00	27.52	C
ATOM	3921	O	VAL	A	498	20.314	-6.011	44.377	1.00	26.89	O
ATOM	3922	CB	VAL	A	498	20.934	-8.371	47.162	1.00	25.41	C
ATOM	3923	CG1	VAL	A	498	22.373	-8.146	47.637	1.00	23.31	C
ATOM	3924	CG2	VAL	A	498	20.075	-8.802	48.361	1.00	25.94	C
ATOM	3925	N	PRO	A	499	21.622	-7.846	44.516	1.00	30.00	N
ATOM	3926	CA	PRO	A	499	22.892	-7.469	43.868	1.00	29.18	C
ATOM	3927	C	PRO	A	499	23.366	-6.065	44.192	1.00	29.84	C
ATOM	3928	O	PRO	A	499	24.553	-5.856	44.419	1.00	32.19	O

ATOM	3929	CB	PRO	A	499	22.589	-7.640	42.383	1.00	29.25	C
ATOM	3930	CG	PRO	A	499	21.521	-8.787	42.353	1.00	31.67	C
ATOM	3931	CD	PRO	A	499	21.046	-9.013	43.821	1.00	29.92	C
ATOM	3932	N	LYS	A	500	22.480	-5.092	44.014	1.00	29.43	N
ATOM	3933	CA	LYS	A	500	22.604	-3.779	44.641	1.00	28.77	C
ATOM	3934	C	LYS	A	500	23.964	-3.178	44.341	1.00	29.16	C
ATOM	3935	O	LYS	A	500	24.597	-2.585	45.213	1.00	31.34	O
ATOM	3936	CB	LYS	A	500	22.376	-3.880	46.153	1.00	25.37	C
ATOM	3937	CG	LYS	A	500	21.848	-2.597	46.770	1.00	23.83	C
ATOM	3938	CD	LYS	A	500	21.013	-2.876	48.001	1.00	24.99	C
ATOM	3939	CE	LYS	A	500	19.991	-3.991	47.712	1.00	29.69	C
ATOM	3940	NZ	LYS	A	500	18.606	-3.820	48.316	1.00	30.96	N1+
ATOM	3941	N	GLU	A	501	24.456	-3.494	43.144	1.00	28.36	N
ATOM	3942	CA	GLU	A	501	25.733	-3.020	42.626	1.00	27.10	C
ATOM	3943	C	GLU	A	501	26.219	-1.775	43.365	1.00	23.87	C
ATOM	3944	O	GLU	A	501	25.440	-0.854	43.611	1.00	24.20	O
ATOM	3945	CB	GLU	A	501	25.583	-2.722	41.120	1.00	28.81	C
ATOM	3946	CG	GLU	A	501	26.853	-2.919	40.279	1.00	27.95	C
ATOM	3947	CD	GLU	A	501	26.979	-4.325	39.717	1.00	26.77	C
ATOM	3948	OE1	GLU	A	501	25.944	-4.926	39.354	1.00	26.88	O
ATOM	3949	OE2	GLU	A	501	28.114	-4.842	39.661	1.00	27.69	O1-
ATOM	3950	N	PHE	A	502	27.466	-1.790	43.799	1.00	19.52	N
ATOM	3951	CA	PHE	A	502	28.068	-0.583	44.320	1.00	21.84	C
ATOM	3952	C	PHE	A	502	29.008	0.086	43.277	1.00	22.82	C
ATOM	3953	O	PHE	A	502	29.712	-0.598	42.551	1.00	24.52	O
ATOM	3954	CB	PHE	A	502	28.827	-0.921	45.617	1.00	22.57	C
ATOM	3955	CG	PHE	A	502	28.007	-0.747	46.897	1.00	24.13	C
ATOM	3956	CD1	PHE	A	502	26.662	-0.372	46.856	1.00	20.81	C
ATOM	3957	CD2	PHE	A	502	28.627	-0.839	48.149	1.00	22.46	C
ATOM	3958	CE1	PHE	A	502	25.976	-0.085	48.030	1.00	19.06	C
ATOM	3959	CE2	PHE	A	502	27.937	-0.544	49.329	1.00	18.64	C
ATOM	3960	CZ	PHE	A	502	26.621	-0.165	49.266	1.00	19.92	C
ATOM	3961	N	ASN	A	503	28.876	1.392	43.069	1.00	22.88	N
ATOM	3962	CA	ASN	A	503	30.017	2.214	42.668	1.00	24.10	C
ATOM	3963	C	ASN	A	503	30.509	2.157	41.188	1.00	25.87	C
ATOM	3964	O	ASN	A	503	31.690	2.401	40.905	1.00	24.39	O
ATOM	3965	CB	ASN	A	503	31.167	1.906	43.630	1.00	24.77	C
ATOM	3966	CG	ASN	A	503	30.765	2.064	45.094	1.00	25.30	C
ATOM	3967	ND2	ASN	A	503	31.270	1.181	45.961	1.00	25.44	N
ATOM	3968	OD1	ASN	A	503	30.024	2.978	45.442	1.00	26.75	O
ATOM	3969	N	ALA	A	504	29.564	2.196	40.254	1.00	28.88	N
ATOM	3970	CA	ALA	A	504	29.804	1.734	38.874	1.00	31.13	C
ATOM	3971	C	ALA	A	504	30.300	2.776	37.823	1.00	31.37	C
ATOM	3972	O	ALA	A	504	29.549	3.108	36.885	1.00	29.77	O
ATOM	3973	CB	ALA	A	504	28.522	1.003	38.351	1.00	29.20	C
ATOM	3974	N	GLU	A	505	31.615	3.064	37.847	1.00	31.12	N
ATOM	3975	CA	GLU	A	505	32.305	4.005	36.923	1.00	30.29	C
ATOM	3976	C	GLU	A	505	32.672	3.490	35.500	1.00	30.54	C
ATOM	3977	O	GLU	A	505	33.795	3.603	35.040	1.00	30.90	O
ATOM	3978	CB	GLU	A	505	33.555	4.579	37.623	1.00	29.84	C
ATOM	3979	CG	GLU	A	505	34.522	5.484	36.794	1.00	30.64	C
ATOM	3980	CD	GLU	A	505	33.845	6.636	36.067	1.00	30.76	C
ATOM	3981	OE1	GLU	A	505	32.604	6.713	36.126	1.00	33.58	O
ATOM	3982	OE2	GLU	A	505	34.546	7.445	35.405	1.00	27.70	O1-
ATOM	3983	N	THR	A	506	31.770	2.737	34.900	1.00	32.72	N
ATOM	3984	CA	THR	A	506	31.498	2.842	33.477	1.00	30.71	C
ATOM	3985	C	THR	A	506	30.144	3.518	33.584	1.00	30.02	C
ATOM	3986	O	THR	A	506	29.098	2.881	33.485	1.00	30.52	O
ATOM	3987	CB	THR	A	506	31.347	1.480	32.857	1.00	31.87	C
ATOM	3988	CG2	THR	A	506	30.724	1.603	31.495	1.00	32.08	C
ATOM	3989	OG1	THR	A	506	32.644	0.859	32.776	1.00	33.97	O
ATOM	3990	N	PHE	A	507	30.249	4.657	34.251	1.00	28.98	N
ATOM	3991	CA	PHE	A	507	29.169	5.342	34.917	1.00	26.92	C
ATOM	3992	C	PHE	A	507	29.075	6.625	34.106	1.00	25.90	C
ATOM	3993	O	PHE	A	507	28.730	6.586	32.917	1.00	22.64	O
ATOM	3994	CB	PHE	A	507	29.648	5.661	36.330	1.00	27.01	C
ATOM	3995	CG	PHE	A	507	28.600	6.192	37.248	1.00	28.40	C
ATOM	3996	CD1	PHE	A	507	27.527	6.923	36.778	1.00	26.26	C
ATOM	3997	CD2	PHE	A	507	28.789	6.093	38.622	1.00	28.34	C
ATOM	3998	CE1	PHE	A	507	26.673	7.551	37.666	1.00	28.02	C
ATOM	3999	CE2	PHE	A	507	27.934	6.718	39.511	1.00	26.64	C

ATOM	4000	CZ	PHE	A	507	26.882	7.446	39.035	1.00	26.34	C
ATOM	4001	N	THR	A	508	29.795	7.615	34.624	1.00	23.79	N
ATOM	4002	CA	THR	A	508	29.605	9.007	34.270	1.00	25.58	C
ATOM	4003	C	THR	A	508	30.579	9.372	33.153	1.00	24.27	C
ATOM	4004	O	THR	A	508	31.651	9.945	33.379	1.00	19.34	O
ATOM	4005	CB	THR	A	508	29.824	9.898	35.522	1.00	27.81	C
ATOM	4006	CG2	THR	A	508	29.006	11.184	35.427	1.00	27.64	C
ATOM	4007	OG1	THR	A	508	29.411	9.172	36.692	1.00	27.38	O
ATOM	4008	N	PHE	A	509	30.175	9.076	31.927	1.00	26.09	N
ATOM	4009	CA	PHE	A	509	31.089	9.209	30.800	1.00	29.27	C
ATOM	4010	C	PHE	A	509	31.562	10.649	30.558	1.00	29.37	C
ATOM	4011	O	PHE	A	509	32.470	10.857	29.742	1.00	29.22	O
ATOM	4012	CB	PHE	A	509	30.475	8.578	29.519	1.00	28.61	C
ATOM	4013	CG	PHE	A	509	29.409	9.410	28.848	1.00	30.39	C
ATOM	4014	CD1	PHE	A	509	29.751	10.520	28.076	1.00	31.31	C
ATOM	4015	CD2	PHE	A	509	28.107	8.935	28.764	1.00	31.82	C
ATOM	4016	CE1	PHE	A	509	28.831	11.131	27.223	1.00	29.90	C
ATOM	4017	CE2	PHE	A	509	27.170	9.543	27.906	1.00	31.41	C
ATOM	4018	CZ	PHE	A	509	27.541	10.639	27.136	1.00	31.04	C
ATOM	4019	N	HIS	A	510	31.160	11.554	31.466	1.00	28.52	N
ATOM	4020	CA	HIS	A	510	31.106	13.001	31.228	1.00	26.73	C
ATOM	4021	C	HIS	A	510	31.430	13.363	29.766	1.00	27.36	C
ATOM	4022	O	HIS	A	510	30.619	13.094	28.892	1.00	27.39	O
ATOM	4023	CB	HIS	A	510	32.021	13.738	32.212	1.00	24.61	C
ATOM	4024	CG	HIS	A	510	32.016	15.224	32.042	1.00	23.20	C
ATOM	4025	CD2	HIS	A	510	31.108	16.156	32.409	1.00	19.13	C
ATOM	4026	ND1	HIS	A	510	32.998	15.900	31.348	1.00	23.83	N
ATOM	4027	CE1	HIS	A	510	32.685	17.177	31.279	1.00	20.37	C
ATOM	4028	NE2	HIS	A	510	31.546	17.360	31.923	1.00	18.67	N
ATOM	4029	N	ALA	A	511	32.650	13.831	29.490	1.00	26.47	N
ATOM	4030	CA	ALA	A	511	33.110	14.040	28.119	1.00	26.06	C
ATOM	4031	C	ALA	A	511	32.517	15.279	27.427	1.00	28.02	C
ATOM	4032	O	ALA	A	511	32.011	15.182	26.314	1.00	30.20	O
ATOM	4033	CB	ALA	A	511	32.831	12.774	27.276	1.00	22.01	C
ATOM	4034	N	ASP	A	512	32.665	16.458	28.031	1.00	27.66	N
ATOM	4035	CA	ASP	A	512	31.940	17.650	27.558	1.00	26.35	C
ATOM	4036	C	ASP	A	512	30.605	17.315	26.859	1.00	25.46	C
ATOM	4037	O	ASP	A	512	30.404	17.662	25.687	1.00	22.46	O
ATOM	4038	CB	ASP	A	512	32.822	18.475	26.622	1.00	28.10	C
ATOM	4039	CG	ASP	A	512	32.789	19.984	26.933	1.00	30.49	C
ATOM	4040	OD1	ASP	A	512	32.547	20.373	28.103	1.00	27.50	O
ATOM	4041	OD2	ASP	A	512	33.113	20.783	26.011	1.00	31.67	O1-
ATOM	4042	N	ILE	A	513	29.781	16.505	27.545	1.00	24.03	N
ATOM	4043	CA	ILE	A	513	28.389	16.258	27.174	1.00	18.35	C
ATOM	4044	C	ILE	A	513	27.730	17.571	26.913	1.00	19.35	C
ATOM	4045	O	ILE	A	513	26.907	17.671	26.015	1.00	19.34	O
ATOM	4046	CB	ILE	A	513	27.557	15.616	28.278	1.00	16.43	C
ATOM	4047	CG1	ILE	A	513	28.316	14.488	28.959	1.00	16.18	C
ATOM	4048	CG2	ILE	A	513	26.270	15.102	27.670	1.00	18.39	C
ATOM	4049	CD1	ILE	A	513	27.473	13.550	29.809	1.00	14.73	C
ATOM	4050	N	CYS	A	514	27.917	18.494	27.857	1.00	19.00	N
ATOM	4051	CA	CYS	A	514	27.567	19.896	27.650	1.00	20.07	C
ATOM	4052	C	CYS	A	514	28.126	20.289	26.300	1.00	22.50	C
ATOM	4053	O	CYS	A	514	29.334	20.276	26.095	1.00	23.48	O
ATOM	4054	CB	CYS	A	514	28.217	20.768	28.708	1.00	17.67	C
ATOM	4055	SG	CYS	A	514	30.001	20.505	28.723	1.00	18.01	S
ATOM	4056	N	THR	A	515	27.228	20.406	25.335	1.00	25.46	N
ATOM	4057	CA	THR	A	515	27.580	20.748	23.970	1.00	26.86	C
ATOM	4058	C	THR	A	515	28.699	19.896	23.361	1.00	26.41	C
ATOM	4059	O	THR	A	515	29.493	20.391	22.563	1.00	28.04	O
ATOM	4060	CB	THR	A	515	27.885	22.263	23.827	1.00	28.89	C
ATOM	4061	CG2	THR	A	515	26.576	23.040	23.525	1.00	29.83	C
ATOM	4062	OG1	THR	A	515	28.464	22.767	25.042	1.00	32.17	O
ATOM	4063	N	LEU	A	516	28.791	18.639	23.804	1.00	22.97	N
ATOM	4064	CA	LEU	A	516	28.855	17.500	22.881	1.00	20.76	C
ATOM	4065	C	LEU	A	516	27.510	17.536	22.152	1.00	20.35	C
ATOM	4066	O	LEU	A	516	27.427	17.980	21.001	1.00	19.65	O
ATOM	4067	CB	LEU	A	516	28.905	16.167	23.656	1.00	18.70	C
ATOM	4068	CG	LEU	A	516	30.129	15.387	24.146	1.00	11.26	C
ATOM	4069	CD1	LEU	A	516	29.858	13.895	24.061	1.00	11.26	C
ATOM	4070	CD2	LEU	A	516	31.309	15.729	23.330	1.00	14.12	C

ATOM	4071	N	SER	A	517	26.489	17.504	23.015	1.00	21.27	N
ATOM	4072	CA	SER	A	517	25.113	17.099	22.728	1.00	18.57	C
ATOM	4073	C	SER	A	517	24.157	18.259	22.953	1.00	17.16	C
ATOM	4074	O	SER	A	517	24.307	18.999	23.915	1.00	14.00	O
ATOM	4075	CB	SER	A	517	24.713	15.963	23.680	1.00	20.93	C
ATOM	4076	OG	SER	A	517	24.982	16.296	25.045	1.00	16.97	O
ATOM	4077	N	GLU	A	518	23.085	18.293	22.169	1.00	18.23	N
ATOM	4078	CA	GLU	A	518	22.162	19.418	22.155	1.00	19.60	C
ATOM	4079	C	GLU	A	518	20.713	18.940	22.104	1.00	19.98	C
ATOM	4080	O	GLU	A	518	20.437	17.817	21.692	1.00	18.87	O
ATOM	4081	CB	GLU	A	518	22.443	20.318	20.947	1.00	22.90	C
ATOM	4082	CG	GLU	A	518	23.891	20.813	20.811	1.00	25.02	C
ATOM	4083	CD	GLU	A	518	23.986	22.237	20.281	1.00	22.60	C
ATOM	4084	OE1	GLU	A	518	23.615	22.475	19.110	1.00	20.70	O
ATOM	4085	OE2	GLU	A	518	24.388	23.126	21.061	1.00	23.36	O1-
ATOM	4086	N	LYS	A	519	19.797	19.884	22.314	1.00	23.54	N
ATOM	4087	CA	LYS	A	519	18.371	19.614	22.551	1.00	24.75	C
ATOM	4088	C	LYS	A	519	18.200	18.755	23.804	1.00	27.97	C
ATOM	4089	O	LYS	A	519	18.733	17.638	23.900	1.00	28.69	O
ATOM	4090	CB	LYS	A	519	17.732	18.927	21.346	1.00	21.56	C
ATOM	4091	CG	LYS	A	519	16.276	18.526	21.524	1.00	16.97	C
ATOM	4092	CD	LYS	A	519	15.692	18.116	20.174	1.00	17.59	C
ATOM	4093	CE	LYS	A	519	14.341	17.430	20.287	1.00	18.48	C
ATOM	4094	NZ	LYS	A	519	13.728	17.036	18.962	1.00	18.54	N1+
ATOM	4095	N	GLU	A	520	17.552	19.324	24.817	1.00	28.25	N
ATOM	4096	CA	GLU	A	520	17.420	18.641	26.099	1.00	27.40	C
ATOM	4097	C	GLU	A	520	16.947	17.204	25.945	1.00	29.51	C
ATOM	4098	O	GLU	A	520	17.010	16.423	26.886	1.00	31.44	O
ATOM	4099	CB	GLU	A	520	16.459	19.417	26.980	1.00	22.39	C
ATOM	4100	CG	GLU	A	520	16.902	20.824	27.137	1.00	17.69	C
ATOM	4101	CD	GLU	A	520	18.391	20.924	27.333	1.00	16.28	C
ATOM	4102	OE1	GLU	A	520	18.877	20.613	28.429	1.00	17.87	O
ATOM	4103	OE2	GLU	A	520	19.084	21.272	26.372	1.00	17.14	O1-
ATOM	4104	N	ARG	A	521	16.406	16.883	24.775	1.00	32.04	N
ATOM	4105	CA	ARG	A	521	16.024	15.522	24.475	1.00	33.58	C
ATOM	4106	C	ARG	A	521	17.287	14.687	24.495	1.00	33.32	C
ATOM	4107	O	ARG	A	521	17.341	13.664	25.185	1.00	35.16	O
ATOM	4108	CB	ARG	A	521	15.298	15.456	23.131	1.00	34.23	C
ATOM	4109	CG	ARG	A	521	13.950	16.232	23.131	1.00	35.49	C
ATOM	4110	CD	ARG	A	521	12.801	15.429	23.747	1.00	38.31	C
ATOM	4111	NE	ARG	A	521	12.787	14.036	23.296	1.00	39.41	N
ATOM	4112	CZ	ARG	A	521	12.362	13.650	22.094	1.00	40.68	C
ATOM	4113	NH1	ARG	A	521	11.733	14.513	21.308	1.00	43.68	N1+
ATOM	4114	NH2	ARG	A	521	12.479	12.384	21.712	1.00	40.15	N
ATOM	4115	N	GLN	A	522	18.369	15.302	24.032	1.00	30.52	N
ATOM	4116	CA	GLN	A	522	19.687	14.689	24.103	1.00	25.95	C
ATOM	4117	C	GLN	A	522	20.450	15.095	25.345	1.00	20.74	C
ATOM	4118	O	GLN	A	522	21.400	14.411	25.727	1.00	15.80	O
ATOM	4119	CB	GLN	A	522	20.515	15.047	22.867	1.00	26.11	C
ATOM	4120	CG	GLN	A	522	19.902	14.640	21.555	1.00	26.14	C
ATOM	4121	CD	GLN	A	522	20.623	15.273	20.397	1.00	28.67	C
ATOM	4122	NE2	GLN	A	522	19.963	15.346	19.241	1.00	26.87	N
ATOM	4123	OE1	GLN	A	522	21.777	15.681	20.533	1.00	27.66	O
ATOM	4124	N	ILE	A	523	20.145	16.264	25.897	1.00	18.75	N
ATOM	4125	CA	ILE	A	523	20.906	16.687	27.069	1.00	19.51	C
ATOM	4126	C	ILE	A	523	20.389	15.978	28.312	1.00	19.06	C
ATOM	4127	O	ILE	A	523	21.156	15.338	29.050	1.00	19.63	O
ATOM	4128	CB	ILE	A	523	20.862	18.206	27.321	1.00	17.88	C
ATOM	4129	CG1	ILE	A	523	20.994	18.975	26.004	1.00	21.59	C
ATOM	4130	CG2	ILE	A	523	21.993	18.578	28.263	1.00	18.05	C
ATOM	4131	CD1	ILE	A	523	21.840	20.265	26.080	1.00	21.79	C
ATOM	4132	N	LYS	A	524	19.076	16.059	28.512	1.00	16.03	N
ATOM	4133	CA	LYS	A	524	18.464	15.493	29.680	1.00	12.94	C
ATOM	4134	C	LYS	A	524	18.691	13.989	29.649	1.00	13.61	C
ATOM	4135	O	LYS	A	524	19.531	13.510	30.385	1.00	13.89	O
ATOM	4136	CB	LYS	A	524	16.986	15.858	29.752	1.00	10.56	C
ATOM	4137	CG	LYS	A	524	16.375	15.511	31.100	1.00	15.61	C
ATOM	4138	CD	LYS	A	524	15.266	16.457	31.565	1.00	13.48	C
ATOM	4139	CE	LYS	A	524	14.946	16.213	33.033	1.00	11.44	C
ATOM	4140	NZ	LYS	A	524	16.147	16.413	33.888	1.00	5.17	N1+
ATOM	4141	N	LYS	A	525	18.184	13.312	28.625	1.00	14.90	N

ATOM	4142	CA	LYS	A	525	18.299	11.851	28.506	1.00	16.22	C
ATOM	4143	C	LYS	A	525	19.550	11.230	29.180	1.00	17.48	C
ATOM	4144	O	LYS	A	525	19.457	10.186	29.837	1.00	16.17	O
ATOM	4145	CB	LYS	A	525	18.212	11.450	27.014	1.00	13.21	C
ATOM	4146	CG	LYS	A	525	18.854	10.133	26.631	1.00	10.66	C
ATOM	4147	CD	LYS	A	525	20.084	10.378	25.775	1.00	15.61	C
ATOM	4148	CE	LYS	A	525	20.840	9.078	25.401	1.00	17.64	C
ATOM	4149	NZ	LYS	A	525	21.001	8.890	23.909	1.00	14.96	N1+
ATOM	4150	N	GLN	A	526	20.707	11.881	29.040	1.00	18.82	N
ATOM	4151	CA	GLN	A	526	21.912	11.429	29.719	1.00	18.67	C
ATOM	4152	C	GLN	A	526	21.750	11.834	31.156	1.00	20.95	C
ATOM	4153	O	GLN	A	526	21.540	10.964	32.010	1.00	21.14	O
ATOM	4154	CB	GLN	A	526	23.178	12.073	29.151	1.00	18.08	C
ATOM	4155	CG	GLN	A	526	23.862	11.294	28.030	1.00	17.91	C
ATOM	4156	CD	GLN	A	526	23.946	9.804	28.298	1.00	20.28	C
ATOM	4157	NE2	GLN	A	526	23.552	9.007	27.320	1.00	22.11	N
ATOM	4158	OE1	GLN	A	526	24.427	9.376	29.339	1.00	22.06	O
ATOM	4159	N	THR	A	527	21.660	13.145	31.398	1.00	21.86	N
ATOM	4160	CA	THR	A	527	21.391	13.654	32.749	1.00	24.95	C
ATOM	4161	C	THR	A	527	20.378	12.766	33.490	1.00	25.85	C
ATOM	4162	O	THR	A	527	20.595	12.424	34.646	1.00	27.72	O
ATOM	4163	CB	THR	A	527	20.843	15.103	32.733	1.00	25.26	C
ATOM	4164	CG2	THR	A	527	21.009	15.752	34.105	1.00	23.79	C
ATOM	4165	OG1	THR	A	527	21.544	15.880	31.752	1.00	24.22	O
ATOM	4166	N	ALA	A	528	19.375	12.254	32.771	1.00	27.33	N
ATOM	4167	CA	ALA	A	528	18.426	11.281	33.333	1.00	26.81	C
ATOM	4168	C	ALA	A	528	18.996	9.857	33.369	1.00	25.61	C
ATOM	4169	O	ALA	A	528	18.965	9.204	34.412	1.00	25.23	O
ATOM	4170	CB	ALA	A	528	17.100	11.306	32.562	1.00	25.49	C
ATOM	4171	N	LEU	A	529	19.654	9.438	32.296	1.00	24.25	N
ATOM	4172	CA	LEU	A	529	20.315	8.139	32.279	1.00	25.05	C
ATOM	4173	C	LEU	A	529	21.267	7.996	33.493	1.00	25.41	C
ATOM	4174	O	LEU	A	529	21.762	6.891	33.797	1.00	25.16	O
ATOM	4175	CB	LEU	A	529	21.086	7.959	30.955	1.00	25.66	C
ATOM	4176	CG	LEU	A	529	20.727	6.802	30.000	1.00	24.04	C
ATOM	4177	CD1	LEU	A	529	20.160	7.352	28.710	1.00	19.96	C
ATOM	4178	CD2	LEU	A	529	21.952	5.961	29.702	1.00	21.68	C
ATOM	4179	N	VAL	A	530	21.523	9.116	34.175	1.00	24.26	N
ATOM	4180	CA	VAL	A	530	22.246	9.102	35.440	1.00	22.74	C
ATOM	4181	C	VAL	A	530	21.369	8.479	36.518	1.00	23.56	C
ATOM	4182	O	VAL	A	530	21.867	7.708	37.360	1.00	22.76	O
ATOM	4183	CB	VAL	A	530	22.618	10.525	35.896	1.00	23.03	C
ATOM	4184	CG1	VAL	A	530	23.610	10.471	37.036	1.00	24.30	C
ATOM	4185	CG2	VAL	A	530	23.200	11.305	34.754	1.00	22.73	C
ATOM	4186	N	GLU	A	531	20.076	8.831	36.502	1.00	22.46	N
ATOM	4187	CA	GLU	A	531	19.139	8.472	37.575	1.00	23.18	C
ATOM	4188	C	GLU	A	531	19.096	7.000	37.982	1.00	24.30	C
ATOM	4189	O	GLU	A	531	19.552	6.668	39.074	1.00	28.02	O
ATOM	4190	CB	GLU	A	531	17.728	8.959	37.262	1.00	22.28	C
ATOM	4191	CG	GLU	A	531	16.791	8.825	38.456	1.00	21.12	C
ATOM	4192	CD	GLU	A	531	16.177	10.137	38.917	1.00	19.64	C
ATOM	4193	OE1	GLU	A	531	16.850	10.917	39.623	1.00	18.65	O
ATOM	4194	OE2	GLU	A	531	14.977	10.337	38.671	1.00	18.88	O1-
ATOM	4195	N	LEU	A	532	18.603	6.115	37.114	1.00	23.63	N
ATOM	4196	CA	LEU	A	532	18.693	4.662	37.362	1.00	24.00	C
ATOM	4197	C	LEU	A	532	19.972	4.240	38.078	1.00	24.04	C
ATOM	4198	O	LEU	A	532	19.907	3.770	39.211	1.00	26.15	O
ATOM	4199	CB	LEU	A	532	18.604	3.854	36.071	1.00	22.16	C
ATOM	4200	CG	LEU	A	532	17.991	4.619	34.926	1.00	23.10	C
ATOM	4201	CD1	LEU	A	532	19.075	5.386	34.246	1.00	28.26	C
ATOM	4202	CD2	LEU	A	532	17.348	3.681	33.973	1.00	27.82	C
ATOM	4203	N	VAL	A	533	21.131	4.440	37.442	1.00	22.79	N
ATOM	4204	CA	VAL	A	533	22.397	3.925	37.974	1.00	19.76	C
ATOM	4205	C	VAL	A	533	22.905	4.700	39.179	1.00	18.89	C
ATOM	4206	O	VAL	A	533	23.874	4.302	39.806	1.00	19.08	O
ATOM	4207	CB	VAL	A	533	23.521	3.852	36.889	1.00	18.59	C
ATOM	4208	CG1	VAL	A	533	23.308	2.624	35.996	1.00	15.07	C
ATOM	4209	CG2	VAL	A	533	23.560	5.142	36.045	1.00	20.41	C
ATOM	4210	N	LYS	A	534	22.243	5.792	39.530	1.00	19.45	N
ATOM	4211	CA	LYS	A	534	22.478	6.365	40.845	1.00	21.27	C
ATOM	4212	C	LYS	A	534	21.526	5.757	41.868	1.00	21.02	C

ATOM	4213	O	LYS	A	534	21.531	6.167	43.023	1.00	20.41	O
ATOM	4214	CB	LYS	A	534	22.357	7.898	40.818	1.00	22.77	C
ATOM	4215	CG	LYS	A	534	20.941	8.444	40.696	1.00	23.98	C
ATOM	4216	CD	LYS	A	534	20.290	8.641	42.054	1.00	28.34	C
ATOM	4217	CE	LYS	A	534	18.928	7.988	42.095	1.00	26.73	C
ATOM	4218	NZ	LYS	A	534	18.037	8.601	41.075	1.00	25.87	N1+
ATOM	4219	N	HIS	A	535	20.627	4.879	41.418	1.00	21.35	N
ATOM	4220	CA	HIS	A	535	19.932	3.950	42.323	1.00	20.99	C
ATOM	4221	C	HIS	A	535	19.602	2.550	41.769	1.00	22.37	C
ATOM	4222	O	HIS	A	535	18.524	2.290	41.214	1.00	22.53	O
ATOM	4223	CB	HIS	A	535	18.722	4.628	42.999	1.00	20.28	C
ATOM	4224	CG	HIS	A	535	17.424	4.489	42.272	1.00	16.66	C
ATOM	4225	CD2	HIS	A	535	17.111	4.603	40.961	1.00	19.33	C
ATOM	4226	ND1	HIS	A	535	16.227	4.401	42.941	1.00	14.54	N
ATOM	4227	CE1	HIS	A	535	15.235	4.488	42.081	1.00	19.05	C
ATOM	4228	NE2	HIS	A	535	15.743	4.611	40.868	1.00	19.23	N
ATOM	4229	N	LYS	A	536	20.476	1.632	42.174	1.00	22.18	N
ATOM	4230	CA	LYS	A	536	20.778	0.332	41.553	1.00	23.44	C
ATOM	4231	C	LYS	A	536	22.184	0.035	42.107	1.00	26.46	C
ATOM	4232	O	LYS	A	536	22.757	-1.031	41.833	1.00	24.60	O
ATOM	4233	CB	LYS	A	536	20.884	0.419	40.023	1.00	18.83	C
ATOM	4234	CG	LYS	A	536	19.572	0.375	39.276	1.00	14.87	C
ATOM	4235	CD	LYS	A	536	19.778	0.539	37.773	1.00	12.15	C
ATOM	4236	CE	LYS	A	536	20.178	-0.774	37.107	1.00	12.18	C
ATOM	4237	NZ	LYS	A	536	19.620	-0.875	35.727	1.00	11.32	N1+
ATOM	4238	N	PRO	A	537	22.840	1.084	42.670	1.00	28.07	N
ATOM	4239	CA	PRO	A	537	23.264	1.257	44.063	1.00	27.56	C
ATOM	4240	C	PRO	A	537	22.139	1.885	44.911	1.00	26.87	C
ATOM	4241	O	PRO	A	537	21.305	2.611	44.393	1.00	26.05	O
ATOM	4242	CB	PRO	A	537	24.475	2.181	43.918	1.00	26.82	C
ATOM	4243	CG	PRO	A	537	24.086	3.095	42.877	1.00	29.18	C
ATOM	4244	CD	PRO	A	537	23.285	2.244	41.868	1.00	30.49	C
ATOM	4245	N	LYS	A	538	22.119	1.587	46.205	1.00	28.13	N
ATOM	4246	CA	LYS	A	538	21.009	1.933	47.109	1.00	27.98	C
ATOM	4247	C	LYS	A	538	19.630	2.015	46.460	1.00	26.40	C
ATOM	4248	O	LYS	A	538	19.218	3.072	45.974	1.00	24.43	O
ATOM	4249	CB	LYS	A	538	21.297	3.229	47.883	1.00	29.62	C
ATOM	4250	CG	LYS	A	538	21.027	3.139	49.423	1.00	25.31	C
ATOM	4251	CD	LYS	A	538	22.012	2.197	50.131	1.00	24.14	C
ATOM	4252	CE	LYS	A	538	21.945	2.359	51.647	1.00	23.68	C
ATOM	4253	NZ	LYS	A	538	23.277	2.474	52.317	1.00	18.75	N1+
ATOM	4254	N	ALA	A	539	18.869	0.938	46.625	1.00	24.41	N
ATOM	4255	CA	ALA	A	539	17.672	0.728	45.840	1.00	24.62	C
ATOM	4256	C	ALA	A	539	16.793	1.958	45.958	1.00	23.58	C
ATOM	4257	O	ALA	A	539	16.534	2.635	44.963	1.00	22.67	O
ATOM	4258	CB	ALA	A	539	16.943	-0.511	46.325	1.00	25.28	C
ATOM	4259	N	THR	A	540	16.559	2.380	47.195	1.00	23.77	N
ATOM	4260	CA	THR	A	540	15.772	3.585	47.440	1.00	23.68	C
ATOM	4261	C	THR	A	540	16.133	4.351	48.713	1.00	25.34	C
ATOM	4262	O	THR	A	540	16.602	3.772	49.709	1.00	23.64	O
ATOM	4263	CB	THR	A	540	14.275	3.272	47.461	1.00	21.40	C
ATOM	4264	CG2	THR	A	540	13.857	2.656	48.804	1.00	20.40	C
ATOM	4265	OG1	THR	A	540	13.546	4.479	47.220	1.00	20.73	O
ATOM	4266	N	LYS	A	541	15.942	5.666	48.654	1.00	26.45	N
ATOM	4267	CA	LYS	A	541	16.156	6.528	49.810	1.00	28.39	C
ATOM	4268	C	LYS	A	541	15.191	7.698	49.794	1.00	27.80	C
ATOM	4269	O	LYS	A	541	14.459	7.884	48.830	1.00	29.39	O
ATOM	4270	CB	LYS	A	541	17.608	7.027	49.847	1.00	29.26	C
ATOM	4271	CG	LYS	A	541	18.614	5.982	50.350	1.00	25.06	C
ATOM	4272	CD	LYS	A	541	18.582	5.886	51.869	1.00	20.48	C
ATOM	4273	CE	LYS	A	541	19.335	7.030	52.505	1.00	17.85	C
ATOM	4274	NZ	LYS	A	541	20.734	7.139	52.022	1.00	16.81	N1+
ATOM	4275	N	GLU	A	542	15.016	8.318	50.952	1.00	29.97	N
ATOM	4276	CA	GLU	A	542	14.101	9.453	51.086	1.00	31.00	C
ATOM	4277	C	GLU	A	542	14.840	10.660	50.478	1.00	30.24	C
ATOM	4278	O	GLU	A	542	15.814	10.456	49.756	1.00	29.44	O
ATOM	4279	CB	GLU	A	542	13.755	9.669	52.582	1.00	29.69	C
ATOM	4280	CG	GLU	A	542	12.602	10.630	52.878	1.00	26.76	C
ATOM	4281	CD	GLU	A	542	11.289	10.221	52.240	1.00	26.79	C
ATOM	4282	OE1	GLU	A	542	11.093	9.010	51.995	1.00	25.61	O
ATOM	4283	OE2	GLU	A	542	10.425	11.112	52.035	1.00	25.89	O1-

ATOM	4284	N	GLN	A	543	14.538	11.862	50.981	1.00	30.95	N
ATOM	4285	CA	GLN	A	543	15.020	13.157	50.451	1.00	29.95	C
ATOM	4286	C	GLN	A	543	16.307	13.073	49.606	1.00	29.03	C
ATOM	4287	O	GLN	A	543	16.294	13.347	48.389	1.00	25.49	O
ATOM	4288	CB	GLN	A	543	15.208	14.161	51.624	1.00	26.87	C
ATOM	4289	CG	GLN	A	543	16.249	13.747	52.684	1.00	21.98	C
ATOM	4290	CD	GLN	A	543	15.650	13.140	53.962	1.00	21.18	C
ATOM	4291	NE2	GLN	A	543	16.336	13.335	55.077	1.00	20.31	N
ATOM	4292	OE1	GLN	A	543	14.613	12.479	53.939	1.00	20.60	O
ATOM	4293	N	LEU	A	544	17.307	12.444	50.225	1.00	26.45	N
ATOM	4294	CA	LEU	A	544	18.653	12.279	49.694	1.00	24.19	C
ATOM	4295	C	LEU	A	544	18.793	12.637	48.228	1.00	22.92	C
ATOM	4296	O	LEU	A	544	19.185	13.758	47.923	1.00	23.86	O
ATOM	4297	CB	LEU	A	544	19.140	10.841	49.914	1.00	21.09	C
ATOM	4298	CG	LEU	A	544	19.186	10.233	51.311	1.00	16.44	C
ATOM	4299	CD1	LEU	A	544	19.940	11.158	52.243	1.00	16.15	C
ATOM	4300	CD2	LEU	A	544	17.789	9.967	51.819	1.00	16.66	C
ATOM	4301	N	LYS	A	545	18.194	11.817	47.362	1.00	20.06	N
ATOM	4302	CA	LYS	A	545	18.749	11.587	46.040	1.00	20.52	C
ATOM	4303	C	LYS	A	545	18.614	12.701	45.002	1.00	22.77	C
ATOM	4304	O	LYS	A	545	18.889	12.471	43.832	1.00	25.57	O
ATOM	4305	CB	LYS	A	545	18.248	10.254	45.461	1.00	18.18	C
ATOM	4306	CG	LYS	A	545	16.821	10.244	44.916	1.00	17.26	C
ATOM	4307	CD	LYS	A	545	15.906	9.289	45.696	1.00	12.74	C
ATOM	4308	CE	LYS	A	545	16.474	7.882	45.800	1.00	8.79	C
ATOM	4309	NZ	LYS	A	545	17.238	7.691	47.056	1.00	6.18	N1+
ATOM	4310	N	ALA	A	546	18.410	13.938	45.439	1.00	23.50	N
ATOM	4311	CA	ALA	A	546	18.556	15.071	44.535	1.00	22.32	C
ATOM	4312	C	ALA	A	546	19.741	15.954	44.903	1.00	22.35	C
ATOM	4313	O	ALA	A	546	20.086	16.854	44.156	1.00	23.42	O
ATOM	4314	CB	ALA	A	546	17.277	15.899	44.490	1.00	23.51	C
ATOM	4315	N	VAL	A	547	20.379	15.694	46.036	1.00	22.24	N
ATOM	4316	CA	VAL	A	547	21.717	16.229	46.279	1.00	23.87	C
ATOM	4317	C	VAL	A	547	22.677	15.472	45.360	1.00	23.89	C
ATOM	4318	O	VAL	A	547	23.877	15.782	45.287	1.00	23.60	O
ATOM	4319	CB	VAL	A	547	22.170	16.040	47.768	1.00	25.64	C
ATOM	4320	CG1	VAL	A	547	22.400	14.566	48.059	1.00	25.82	C
ATOM	4321	CG2	VAL	A	547	23.449	16.861	48.073	1.00	24.16	C
ATOM	4322	N	MET	A	548	22.132	14.475	44.661	1.00	22.84	N
ATOM	4323	CA	MET	A	548	22.841	13.763	43.593	1.00	20.52	C
ATOM	4324	C	MET	A	548	22.779	14.480	42.239	1.00	17.26	C
ATOM	4325	O	MET	A	548	23.748	15.082	41.805	1.00	17.45	O
ATOM	4326	CB	MET	A	548	22.268	12.353	43.445	1.00	21.64	C
ATOM	4327	CG	MET	A	548	22.122	11.605	44.756	1.00	18.22	C
ATOM	4328	SD	MET	A	548	23.630	10.850	45.228	1.00	14.88	S
ATOM	4329	CE	MET	A	548	24.207	12.056	46.438	1.00	16.13	C
ATOM	4330	N	ASP	A	549	21.618	14.485	41.609	1.00	13.78	N
ATOM	4331	CA	ASP	A	549	21.502	15.018	40.264	1.00	16.01	C
ATOM	4332	C	ASP	A	549	21.636	16.528	40.156	1.00	18.51	C
ATOM	4333	O	ASP	A	549	21.000	17.147	39.300	1.00	20.40	O
ATOM	4334	CB	ASP	A	549	20.174	14.604	39.649	1.00	14.29	C
ATOM	4335	CG	ASP	A	549	20.323	13.496	38.677	1.00	14.70	C
ATOM	4336	OD1	ASP	A	549	21.204	12.641	38.891	1.00	11.87	O
ATOM	4337	OD2	ASP	A	549	19.566	13.495	37.687	1.00	17.11	O1-
ATOM	4338	N	ASP	A	550	22.330	17.136	41.102	1.00	19.81	N
ATOM	4339	CA	ASP	A	550	22.847	18.486	40.917	1.00	25.24	C
ATOM	4340	C	ASP	A	550	24.372	18.383	41.093	1.00	27.84	C
ATOM	4341	O	ASP	A	550	25.143	18.785	40.213	1.00	29.39	O
ATOM	4342	CB	ASP	A	550	22.214	19.460	41.935	1.00	24.68	C
ATOM	4343	CG	ASP	A	550	20.805	19.913	41.527	1.00	25.32	C
ATOM	4344	OD1	ASP	A	550	20.168	19.239	40.694	1.00	26.62	O
ATOM	4345	OD2	ASP	A	550	20.334	20.971	42.003	1.00	23.45	O1-
ATOM	4346	N	PHE	A	551	24.778	17.554	42.046	1.00	29.10	N
ATOM	4347	CA	PHE	A	551	26.143	17.056	42.061	1.00	29.37	C
ATOM	4348	C	PHE	A	551	26.481	16.269	40.798	1.00	28.36	C
ATOM	4349	O	PHE	A	551	27.633	15.963	40.538	1.00	29.93	O
ATOM	4350	CB	PHE	A	551	26.361	16.227	43.324	1.00	30.56	C
ATOM	4351	CG	PHE	A	551	26.670	17.064	44.509	1.00	31.41	C
ATOM	4352	CD1	PHE	A	551	26.260	18.398	44.526	1.00	31.60	C
ATOM	4353	CD2	PHE	A	551	27.588	16.637	45.447	1.00	32.87	C
ATOM	4354	CE1	PHE	A	551	26.774	19.299	45.427	1.00	31.67	C

ATOM	4355	CE2	PHE	A	551	28.120	17.542	46.375	1.00	34.18	C
ATOM	4356	CZ	PHE	A	551	27.712	18.878	46.357	1.00	33.28	C
ATOM	4357	N	ALA	A	552	25.470	16.021	39.976	1.00	27.01	N
ATOM	4358	CA	ALA	A	552	25.676	15.608	38.605	1.00	25.37	C
ATOM	4359	C	ALA	A	552	24.735	16.431	37.719	1.00	25.73	C
ATOM	4360	O	ALA	A	552	23.980	15.910	36.886	1.00	24.39	O
ATOM	4361	CB	ALA	A	552	25.417	14.134	38.461	1.00	26.18	C
ATOM	4362	N	ALA	A	553	24.769	17.732	37.975	1.00	24.63	N
ATOM	4363	CA	ALA	A	553	24.274	18.746	37.068	1.00	22.98	C
ATOM	4364	C	ALA	A	553	25.328	19.824	37.002	1.00	25.17	C
ATOM	4365	O	ALA	A	553	25.138	20.792	36.306	1.00	26.82	O
ATOM	4366	CB	ALA	A	553	23.003	19.333	37.572	1.00	23.98	C
ATOM	4367	N	PHE	A	554	26.340	19.752	37.866	1.00	27.85	N
ATOM	4368	CA	PHE	A	554	27.586	20.505	37.668	1.00	28.64	C
ATOM	4369	C	PHE	A	554	28.412	19.808	36.596	1.00	25.54	C
ATOM	4370	O	PHE	A	554	29.324	20.398	36.026	1.00	24.77	O
ATOM	4371	CB	PHE	A	554	28.405	20.583	38.968	1.00	32.92	C
ATOM	4372	CG	PHE	A	554	28.806	21.997	39.366	1.00	37.67	C
ATOM	4373	CD1	PHE	A	554	28.374	23.110	38.618	1.00	39.00	C
ATOM	4374	CD2	PHE	A	554	29.534	22.220	40.544	1.00	37.65	C
ATOM	4375	CE1	PHE	A	554	28.648	24.436	39.051	1.00	39.21	C
ATOM	4376	CE2	PHE	A	554	29.818	23.532	40.984	1.00	40.34	C
ATOM	4377	CZ	PHE	A	554	29.369	24.647	40.233	1.00	39.54	C
ATOM	4378	N	VAL	A	555	28.081	18.543	36.352	1.00	23.93	N
ATOM	4379	CA	VAL	A	555	28.467	17.800	35.147	1.00	22.21	C
ATOM	4380	C	VAL	A	555	28.557	18.670	33.893	1.00	20.12	C
ATOM	4381	O	VAL	A	555	29.305	18.360	32.975	1.00	18.10	O
ATOM	4382	CB	VAL	A	555	27.484	16.602	34.897	1.00	21.30	C
ATOM	4383	CG1	VAL	A	555	26.074	17.094	34.820	1.00	22.10	C
ATOM	4384	CG2	VAL	A	555	27.815	15.870	33.632	1.00	22.52	C
ATOM	4385	N	GLU	A	556	27.829	19.772	33.855	1.00	20.36	N
ATOM	4386	CA	GLU	A	556	28.107	20.753	32.822	1.00	22.51	C
ATOM	4387	C	GLU	A	556	29.129	21.755	33.324	1.00	22.13	C
ATOM	4388	O	GLU	A	556	30.316	21.503	33.183	1.00	21.46	O
ATOM	4389	CB	GLU	A	556	26.827	21.440	32.333	1.00	24.42	C
ATOM	4390	CG	GLU	A	556	26.014	20.591	31.348	1.00	25.09	C
ATOM	4391	CD	GLU	A	556	25.397	19.340	32.002	1.00	29.89	C
ATOM	4392	OE1	GLU	A	556	26.157	18.391	32.313	1.00	28.92	O
ATOM	4393	OE2	GLU	A	556	24.150	19.300	32.192	1.00	30.78	O1-
ATOM	4394	N	LYS	A	557	28.693	22.721	34.130	1.00	23.25	N
ATOM	4395	CA	LYS	A	557	29.514	23.885	34.484	1.00	26.16	C
ATOM	4396	C	LYS	A	557	30.893	23.667	35.189	1.00	28.55	C
ATOM	4397	O	LYS	A	557	31.455	24.625	35.736	1.00	32.54	O
ATOM	4398	CB	LYS	A	557	28.688	24.876	35.319	1.00	25.61	C
ATOM	4399	CG	LYS	A	557	27.221	24.986	34.979	1.00	25.26	C
ATOM	4400	CD	LYS	A	557	26.383	25.468	36.212	1.00	26.93	C
ATOM	4401	CE	LYS	A	557	24.868	25.275	35.938	1.00	29.30	C
ATOM	4402	NZ	LYS	A	557	23.869	26.075	36.726	1.00	26.93	N1+
ATOM	4403	N	CYS	A	558	31.439	22.448	35.204	1.00	28.73	N
ATOM	4404	CA	CYS	A	558	32.899	22.266	35.342	1.00	26.69	C
ATOM	4405	C	CYS	A	558	33.460	21.735	34.016	1.00	26.16	C
ATOM	4406	O	CYS	A	558	34.575	21.193	33.962	1.00	25.82	O
ATOM	4407	CB	CYS	A	558	33.247	21.290	36.484	1.00	27.88	C
ATOM	4408	SG	CYS	A	558	34.126	19.745	35.984	1.00	25.90	S
ATOM	4409	N	CYS	A	559	32.702	21.924	32.939	1.00	24.28	N
ATOM	4410	CA	CYS	A	559	33.067	21.378	31.638	1.00	24.57	C
ATOM	4411	C	CYS	A	559	33.527	22.453	30.635	1.00	25.31	C
ATOM	4412	O	CYS	A	559	32.955	22.594	29.534	1.00	22.80	O
ATOM	4413	CB	CYS	A	559	31.882	20.610	31.057	1.00	24.33	C
ATOM	4414	SG	CYS	A	559	30.664	21.671	30.225	1.00	18.67	S
ATOM	4415	N	LYS	A	560	34.588	23.170	30.993	1.00	24.30	N
ATOM	4416	CA	LYS	A	560	35.196	24.124	30.082	1.00	24.61	C
ATOM	4417	C	LYS	A	560	36.487	24.703	30.634	1.00	24.70	C
ATOM	4418	O	LYS	A	560	36.873	24.417	31.765	1.00	22.58	O
ATOM	4419	CB	LYS	A	560	34.215	25.242	29.754	1.00	25.54	C
ATOM	4420	CG	LYS	A	560	33.656	25.152	28.339	1.00	26.31	C
ATOM	4421	CD	LYS	A	560	32.511	26.109	28.108	1.00	24.00	C
ATOM	4422	CE	LYS	A	560	31.495	25.480	27.188	1.00	25.24	C
ATOM	4423	NZ	LYS	A	560	31.446	24.014	27.391	1.00	26.72	N1+
ATOM	4424	N	ALA	A	561	37.126	25.555	29.841	1.00	24.25	N
ATOM	4425	CA	ALA	A	561	38.507	25.915	30.078	1.00	24.71	C

ATOM	4426	C	ALA	A	561	39.300	24.620	30.175	1.00	26.65	C
ATOM	4427	O	ALA	A	561	39.333	23.999	31.218	1.00	27.41	O
ATOM	4428	CB	ALA	A	561	38.622	26.707	31.359	1.00	25.16	C
ATOM	4429	N	ASP	A	562	39.642	24.065	29.016	1.00	30.60	N
ATOM	4430	CA	ASP	A	562	40.525	22.892	28.929	1.00	30.34	C
ATOM	4431	C	ASP	A	562	39.961	21.653	29.616	1.00	31.09	C
ATOM	4432	O	ASP	A	562	40.593	21.132	30.562	1.00	31.08	O
ATOM	4433	CB	ASP	A	562	41.905	23.198	29.516	1.00	28.16	C
ATOM	4434	CG	ASP	A	562	42.952	22.216	29.054	1.00	25.04	C
ATOM	4435	OD1	ASP	A	562	42.717	21.514	28.053	1.00	24.20	O
ATOM	4436	OD2	ASP	A	562	44.000	22.117	29.707	1.00	28.51	O1-
ATOM	4437	N	ASP	A	563	38.979	21.040	28.935	1.00	30.71	N
ATOM	4438	CA	ASP	A	563	38.059	20.068	29.538	1.00	28.76	C
ATOM	4439	C	ASP	A	563	38.485	18.610	29.373	1.00	28.00	C
ATOM	4440	O	ASP	A	563	39.612	18.256	29.693	1.00	28.65	O
ATOM	4441	CB	ASP	A	563	36.615	20.261	29.028	1.00	30.30	C
ATOM	4442	CG	ASP	A	563	36.508	21.125	27.746	1.00	33.01	C
ATOM	4443	OD1	ASP	A	563	37.154	22.206	27.640	1.00	32.70	O
ATOM	4444	OD2	ASP	A	563	35.634	20.803	26.908	1.00	31.15	O1-
ATOM	4445	N	LYS	A	564	37.563	17.749	28.966	1.00	29.53	N
ATOM	4446	CA	LYS	A	564	37.756	16.283	28.945	1.00	31.53	C
ATOM	4447	C	LYS	A	564	38.549	15.598	30.061	1.00	32.06	C
ATOM	4448	O	LYS	A	564	38.498	14.370	30.188	1.00	32.29	O
ATOM	4449	CB	LYS	A	564	38.296	15.821	27.591	1.00	30.45	C
ATOM	4450	CG	LYS	A	564	37.233	15.744	26.497	1.00	31.07	C
ATOM	4451	CD	LYS	A	564	36.111	14.775	26.849	1.00	30.53	C
ATOM	4452	CE	LYS	A	564	35.347	14.318	25.598	1.00	32.26	C
ATOM	4453	NZ	LYS	A	564	35.355	12.798	25.474	1.00	34.40	N1+
ATOM	4454	N	GLU	A	565	39.050	16.383	31.006	1.00	34.20	N
ATOM	4455	CA	GLU	A	565	39.522	15.830	32.269	1.00	33.71	C
ATOM	4456	C	GLU	A	565	39.123	16.707	33.477	1.00	33.57	C
ATOM	4457	O	GLU	A	565	39.325	16.298	34.620	1.00	36.71	O
ATOM	4458	CB	GLU	A	565	41.038	15.547	32.203	1.00	31.00	C
ATOM	4459	CG	GLU	A	565	41.948	16.433	33.029	1.00	28.71	C
ATOM	4460	CD	GLU	A	565	41.705	17.906	32.810	1.00	28.14	C
ATOM	4461	OE1	GLU	A	565	41.476	18.343	31.664	1.00	27.94	O
ATOM	4462	OE2	GLU	A	565	41.605	18.611	33.826	1.00	31.46	O1-
ATOM	4463	N	THR	A	566	38.550	17.891	33.230	1.00	31.43	N
ATOM	4464	CA	THR	A	566	37.891	18.648	34.290	1.00	30.06	C
ATOM	4465	C	THR	A	566	36.888	17.740	34.978	1.00	31.89	C
ATOM	4466	O	THR	A	566	37.183	17.117	36.017	1.00	33.59	O
ATOM	4467	CB	THR	A	566	37.091	19.837	33.754	1.00	27.34	C
ATOM	4468	CG2	THR	A	566	37.562	21.118	34.385	1.00	29.75	C
ATOM	4469	OG1	THR	A	566	37.226	19.915	32.329	1.00	28.29	O
ATOM	4470	N	CYS	A	567	35.700	17.644	34.390	1.00	32.18	N
ATOM	4471	CA	CYS	A	567	34.654	16.825	34.979	1.00	31.39	C
ATOM	4472	C	CYS	A	567	34.889	15.378	34.594	1.00	29.93	C
ATOM	4473	O	CYS	A	567	34.352	14.909	33.590	1.00	29.42	O
ATOM	4474	CB	CYS	A	567	33.262	17.276	34.513	1.00	29.68	C
ATOM	4475	SG	CYS	A	567	33.055	19.080	34.407	1.00	25.19	S
ATOM	4476	N	PHE	A	568	35.686	14.688	35.405	1.00	28.61	N
ATOM	4477	CA	PHE	A	568	35.928	13.255	35.250	1.00	28.31	C
ATOM	4478	C	PHE	A	568	36.751	12.792	36.449	1.00	29.41	C
ATOM	4479	O	PHE	A	568	36.664	11.642	36.860	1.00	31.51	O
ATOM	4480	CB	PHE	A	568	36.729	12.998	33.976	1.00	25.95	C
ATOM	4481	CG	PHE	A	568	36.206	11.876	33.139	1.00	21.28	C
ATOM	4482	CD1	PHE	A	568	35.062	12.035	32.394	1.00	20.57	C
ATOM	4483	CD2	PHE	A	568	36.903	10.698	33.038	1.00	20.14	C
ATOM	4484	CE1	PHE	A	568	34.622	11.051	31.574	1.00	17.15	C
ATOM	4485	CE2	PHE	A	568	36.471	9.710	32.217	1.00	17.57	C
ATOM	4486	CZ	PHE	A	568	35.321	9.888	31.481	1.00	19.73	C
ATOM	4487	N	ALA	A	569	37.683	13.636	36.877	1.00	28.87	N
ATOM	4488	CA	ALA	A	569	38.383	13.420	38.134	1.00	28.65	C
ATOM	4489	C	ALA	A	569	37.468	13.939	39.220	1.00	28.03	C
ATOM	4490	O	ALA	A	569	37.356	13.378	40.309	1.00	26.78	O
ATOM	4491	CB	ALA	A	569	39.710	14.213	38.138	1.00	30.00	C
ATOM	4492	N	GLU	A	570	36.832	15.057	38.898	1.00	30.62	N
ATOM	4493	CA	GLU	A	570	36.151	15.878	39.882	1.00	30.63	C
ATOM	4494	C	GLU	A	570	34.945	15.123	40.390	1.00	30.05	C
ATOM	4495	O	GLU	A	570	35.001	14.560	41.483	1.00	29.90	O
ATOM	4496	CB	GLU	A	570	35.749	17.210	39.258	1.00	28.89	C

ATOM	4497	CG	GLU	A	570	36.936	18.084	38.893	1.00	27.66	C
ATOM	4498	CD	GLU	A	570	36.512	19.417	38.301	1.00	29.60	C
ATOM	4499	OE1	GLU	A	570	35.295	19.714	38.265	1.00	27.40	O
ATOM	4500	OE2	GLU	A	570	37.407	20.200	37.922	1.00	31.42	O1-
ATOM	4501	N	GLU	A	571	33.921	15.009	39.544	1.00	28.64	N
ATOM	4502	CA	GLU	A	571	32.793	14.109	39.781	1.00	29.73	C
ATOM	4503	C	GLU	A	571	33.172	12.828	40.555	1.00	29.42	C
ATOM	4504	O	GLU	A	571	32.703	12.600	41.666	1.00	26.88	O
ATOM	4505	CB	GLU	A	571	32.153	13.698	38.444	1.00	31.90	C
ATOM	4506	CG	GLU	A	571	31.887	14.842	37.444	1.00	33.12	C
ATOM	4507	CD	GLU	A	571	30.475	15.396	37.551	1.00	31.21	C
ATOM	4508	OE1	GLU	A	571	30.276	16.300	38.392	1.00	29.20	O
ATOM	4509	OE2	GLU	A	571	29.584	14.930	36.791	1.00	28.63	O1-
ATOM	4510	N	GLY	A	572	34.072	12.032	39.986	1.00	29.49	N
ATOM	4511	CA	GLY	A	572	34.301	10.677	40.478	1.00	28.71	C
ATOM	4512	C	GLY	A	572	34.559	10.612	41.965	1.00	25.97	C
ATOM	4513	O	GLY	A	572	34.133	9.670	42.649	1.00	25.03	O
ATOM	4514	N	LYS	A	573	35.292	11.596	42.463	1.00	25.00	N
ATOM	4515	CA	LYS	A	573	35.292	11.839	43.886	1.00	26.40	C
ATOM	4516	C	LYS	A	573	33.907	12.403	44.227	1.00	27.40	C
ATOM	4517	O	LYS	A	573	33.053	11.637	44.652	1.00	28.80	O
ATOM	4518	CB	LYS	A	573	36.422	12.802	44.278	1.00	25.67	C
ATOM	4519	CG	LYS	A	573	37.835	12.284	43.924	1.00	24.04	C
ATOM	4520	CD	LYS	A	573	38.725	12.132	45.169	1.00	21.49	C
ATOM	4521	CE	LYS	A	573	39.633	13.331	45.408	1.00	17.20	C
ATOM	4522	NZ	LYS	A	573	40.867	12.848	46.062	1.00	15.20	N1+
ATOM	4523	N	LYS	A	574	33.581	13.580	43.695	1.00	26.75	N
ATOM	4524	CA	LYS	A	574	32.400	14.324	44.131	1.00	25.51	C
ATOM	4525	C	LYS	A	574	30.989	13.898	43.651	1.00	25.42	C
ATOM	4526	O	LYS	A	574	30.011	14.569	44.005	1.00	25.17	O
ATOM	4527	CB	LYS	A	574	32.612	15.817	43.872	1.00	27.14	C
ATOM	4528	CG	LYS	A	574	32.851	16.209	42.416	1.00	28.72	C
ATOM	4529	CD	LYS	A	574	32.816	17.739	42.193	1.00	28.75	C
ATOM	4530	CE	LYS	A	574	31.382	18.254	41.916	1.00	28.20	C
ATOM	4531	NZ	LYS	A	574	31.384	19.599	41.254	1.00	28.78	N1+
ATOM	4532	N	LEU	A	575	30.860	12.683	43.105	1.00	23.44	N
ATOM	4533	CA	LEU	A	575	29.559	12.086	42.759	1.00	25.31	C
ATOM	4534	C	LEU	A	575	29.409	10.605	43.176	1.00	27.47	C
ATOM	4535	O	LEU	A	575	28.300	10.045	43.137	1.00	26.81	O
ATOM	4536	CB	LEU	A	575	29.301	12.205	41.264	1.00	24.20	C
ATOM	4537	CG	LEU	A	575	28.778	10.958	40.541	1.00	24.99	C
ATOM	4538	CD1	LEU	A	575	27.265	11.091	40.260	1.00	22.96	C
ATOM	4539	CD2	LEU	A	575	29.587	10.746	39.253	1.00	23.54	C
ATOM	4540	N	VAL	A	576	30.545	9.953	43.443	1.00	30.48	N
ATOM	4541	CA	VAL	A	576	30.594	8.583	43.980	1.00	28.40	C
ATOM	4542	C	VAL	A	576	30.933	8.698	45.451	1.00	26.50	C
ATOM	4543	O	VAL	A	576	30.389	7.969	46.264	1.00	26.24	O
ATOM	4544	CB	VAL	A	576	31.703	7.709	43.313	1.00	29.72	C
ATOM	4545	CG1	VAL	A	576	31.613	6.269	43.830	1.00	31.31	C
ATOM	4546	CG2	VAL	A	576	31.568	7.728	41.788	1.00	28.27	C
ATOM	4547	N	ALA	A	577	31.839	9.614	45.783	1.00	26.23	N
ATOM	4548	CA	ALA	A	577	32.042	10.018	47.171	1.00	27.55	C
ATOM	4549	C	ALA	A	577	30.723	10.465	47.754	1.00	27.60	C
ATOM	4550	O	ALA	A	577	30.498	10.341	48.959	1.00	29.06	O
ATOM	4551	CB	ALA	A	577	33.057	11.163	47.280	1.00	24.38	C
ATOM	4552	N	ALA	A	578	29.896	11.084	46.921	1.00	26.48	N
ATOM	4553	CA	ALA	A	578	28.663	11.639	47.421	1.00	28.56	C
ATOM	4554	C	ALA	A	578	27.604	10.545	47.504	1.00	30.37	C
ATOM	4555	O	ALA	A	578	26.515	10.788	48.040	1.00	32.62	O
ATOM	4556	CB	ALA	A	578	28.198	12.775	46.522	1.00	27.95	C
ATOM	4557	N	SER	A	579	27.969	9.336	47.045	1.00	30.43	N
ATOM	4558	CA	SER	A	579	27.041	8.214	46.794	1.00	28.38	C
ATOM	4559	C	SER	A	579	26.717	7.338	48.012	1.00	28.20	C
ATOM	4560	O	SER	A	579	27.423	7.379	49.026	1.00	27.16	O
ATOM	4561	CB	SER	A	579	27.600	7.308	45.678	1.00	26.10	C
ATOM	4562	OG	SER	A	579	27.127	7.695	44.407	1.00	21.67	O
ATOM	4563	N	GLN	A	580	25.858	6.349	47.756	1.00	28.20	N
ATOM	4564	CA	GLN	A	580	25.294	5.456	48.775	1.00	30.20	C
ATOM	4565	C	GLN	A	580	25.251	5.794	50.275	1.00	29.79	C
ATOM	4566	O	GLN	A	580	24.240	6.301	50.763	1.00	29.46	O
ATOM	4567	CB	GLN	A	580	25.887	4.059	48.652	1.00	31.82	C

ATOM	4568	CG	GLN	A	580	24.809	3.035	48.450	1.00	35.01		C
ATOM	4569	CD	GLN	A	580	24.605	2.755	46.984	1.00	39.20		C
ATOM	4570	NE2	GLN	A	580	24.214	3.795	46.222	1.00	39.46		N
ATOM	4571	OE1	GLN	A	580	24.873	1.642	46.513	1.00	37.19		O
ATOM	4572	N	ALA	A	581	26.147	5.153	51.022	1.00	28.09		N
ATOM	4573	CA	ALA	A	581	25.904	4.949	52.433	1.00	28.48		C
ATOM	4574	C	ALA	A	581	26.749	5.880	53.305	1.00	31.33		C
ATOM	4575	O	ALA	A	581	27.878	5.542	53.689	1.00	33.68		O
ATOM	4576	CB	ALA	A	581	26.139	3.517	52.786	1.00	27.41		C
ATOM	4577	N	ALA	A	582	26.292	7.133	53.354	1.00	32.13		N
ATOM	4578	CA	ALA	A	582	26.690	8.140	54.330	1.00	30.12		C
ATOM	4579	C	ALA	A	582	25.992	9.430	53.865	1.00	32.98		C
ATOM	4580	O	ALA	A	582	25.336	10.117	54.686	1.00	34.50		O
ATOM	4581	CB	ALA	A	582	28.212	8.325	54.362	1.00	23.03		C
ATOM	4582	N	LEU	A	583	26.076	9.711	52.548	1.00	32.99		N
ATOM	4583	CA	LEU	A	583	25.497	10.927	51.932	1.00	32.69		C
ATOM	4584	C	LEU	A	583	24.530	10.469	50.841	1.00	33.35		C
ATOM	4585	O	LEU	A	583	23.484	11.124	50.604	1.00	31.85		O
ATOM	4586	CB	LEU	A	583	26.588	11.815	51.276	1.00	28.59		C
ATOM	4587	CG	LEU	A	583	27.733	12.582	51.993	1.00	26.24		C
ATOM	4588	CD1	LEU	A	583	27.189	13.656	52.930	1.00	24.68		C
ATOM	4589	CD2	LEU	A	583	28.651	11.626	52.741	1.00	22.20		C
HETATM	4590	C	UNK		0	-8.743	1.026	14.253	0.00	0.00	.001	A
HETATM	4591	C	UNK		0	-9.951	1.717	14.711	0.00	0.00	.029	A
HETATM	4592	C	UNK		0	-7.512	-0.949	14.907	0.00	0.00	.033	A
HETATM	4593	C	UNK		0	-6.608	-0.707	13.898	0.00	0.00	.039	A
HETATM	4594	C	UNK		0	-8.588	-0.088	15.098	0.00	0.00	.043	A
HETATM	4595	C	UNK		0	-7.817	1.264	13.235	0.00	0.00	.050	A
HETATM	4596	C	UNK		0	-6.759	0.395	13.059	0.00	0.00	.066	A
HETATM	4597	C	UNK		0	-10.542	2.972	14.124	0.00	0.00	.070	C
HETATM	4598	N	UNK		0	-11.768	2.489	12.060	0.00	0.00	.078	N
HETATM	4599	C	UNK		0	-10.433	1.018	15.751	0.00	0.00	.096	A
HETATM	4600	H	UNK		0	-9.778	-0.716	16.700	0.00	0.00	.165	H
HETATM	4601	H	UNK		0	-6.103	1.337	11.466	0.00	0.00	.217	H
HETATM	4602	C	UNK		0	-11.908	2.656	13.513	0.00	0.00	.271	C
HETATM	4603	H	UNK		0	-10.808	2.603	11.774	0.00	0.00	.312	H
HETATM	4604	H	UNK		0	-12.130	1.595	11.763	0.00	0.00	.312	H
HETATM	4605	O	UNK		0	-5.857	0.620	12.066	0.00	0.00	.361	O
HETATM	4606	N	UNK		0	-9.632	-0.063	15.998	0.00	0.00	.365	N
CONNECT	4590											

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CRYST1	58.860	88.280	60.680	90.00	101.85	90.00	P 1 21 1	0		
ATOM	1	N	LYS A	4	-4.155	-21.388	-11.190	1.00	29.11	N
ATOM	2	CA	LYS A	4	-3.964	-19.918	-11.113	1.00	27.16	C
ATOM	3	C	LYS A	4	-2.692	-19.737	-10.315	1.00	26.91	C
ATOM	4	O	LYS A	4	-2.108	-20.724	-9.881	1.00	25.06	O
ATOM	5	CB	LYS A	4	-5.146	-19.257	-10.398	1.00	25.62	C
ATOM	6	CG	LYS A	4	-6.503	-19.517	-11.051	1.00	24.88	C
ATOM	7	CD	LYS A	4	-7.331	-18.233	-11.175	1.00	26.34	C
ATOM	8	CE	LYS A	4	-8.649	-18.441	-11.958	1.00	27.70	C
ATOM	9	NZ	LYS A	4	-9.717	-19.227	-11.215	1.00	25.48	N1+
ATOM	10	N	SER A	5	-2.168	-18.518	-10.290	1.00	28.23	N
ATOM	11	CA	SER A	5	-0.939	-18.247	-9.551	1.00	30.21	C
ATOM	12	C	SER A	5	-1.207	-17.300	-8.380	1.00	30.60	C
ATOM	13	O	SER A	5	-2.299	-16.719	-8.247	1.00	28.63	O
ATOM	14	CB	SER A	5	0.155	-17.652	-10.476	1.00	30.07	C
ATOM	15	OG	SER A	5	0.110	-16.225	-10.543	1.00	25.84	O
ATOM	16	N	GLU A	6	-0.206	-17.159	-7.526	1.00	29.67	N
ATOM	17	CA	GLU A	6	-0.250	-16.146	-6.511	1.00	28.73	C
ATOM	18	C	GLU A	6	0.506	-14.913	-6.949	1.00	25.98	C
ATOM	19	O	GLU A	6	-0.094	-13.854	-7.065	1.00	25.99	O
ATOM	20	CB	GLU A	6	0.289	-16.706	-5.196	1.00	32.20	C
ATOM	21	CG	GLU A	6	-0.730	-17.561	-4.457	1.00	34.86	C
ATOM	22	CD	GLU A	6	-2.158	-17.229	-4.877	1.00	37.50	C
ATOM	23	OE1	GLU A	6	-2.669	-16.146	-4.502	1.00	36.49	O
ATOM	24	OE2	GLU A	6	-2.746	-18.025	-5.641	1.00	41.69	O1-
ATOM	25	N	VAL A	7	1.732	-15.105	-7.428	1.00	26.46	N
ATOM	26	CA	VAL A	7	2.660	-13.992	-7.658	1.00	28.01	C
ATOM	27	C	VAL A	7	2.019	-12.877	-8.472	1.00	29.09	C
ATOM	28	O	VAL A	7	1.728	-11.784	-7.951	1.00	28.54	O
ATOM	29	CB	VAL A	7	3.929	-14.439	-8.413	1.00	27.74	C
ATOM	30	CG1	VAL A	7	4.947	-13.333	-8.405	1.00	29.26	C
ATOM	31	CG2	VAL A	7	4.524	-15.668	-7.773	1.00	31.03	C
ATOM	32	N	ALA A	8	1.681	-13.202	-9.716	1.00	29.77	N
ATOM	33	CA	ALA A	8	1.215	-12.182	-10.646	1.00	29.95	C
ATOM	34	C	ALA A	8	-0.133	-11.672	-10.189	1.00	29.29	C
ATOM	35	O	ALA A	8	-0.491	-10.525	-10.473	1.00	30.27	O
ATOM	36	CB	ALA A	8	1.117	-12.736	-12.073	1.00	29.88	C
ATOM	37	N	HIS A	9	-0.866	-12.500	-9.452	1.00	28.46	N
ATOM	38	CA	HIS A	9	-2.215	-12.121	-9.052	1.00	28.28	C
ATOM	39	C	HIS A	9	-2.121	-10.972	-8.070	1.00	28.15	C
ATOM	40	O	HIS A	9	-2.926	-10.045	-8.124	1.00	28.25	O
ATOM	41	CB	HIS A	9	-2.961	-13.275	-8.387	1.00	26.15	C
ATOM	42	CG	HIS A	9	-4.260	-12.866	-7.776	1.00	23.88	C
ATOM	43	CD2	HIS A	9	-5.086	-11.821	-8.052	1.00	22.55	C
ATOM	44	ND1	HIS A	9	-4.868	-13.577	-6.766	1.00	22.06	N
ATOM	45	CE1	HIS A	9	-6.009	-12.994	-6.443	1.00	23.71	C
ATOM	46	NE2	HIS A	9	-6.162	-11.927	-7.212	1.00	25.62	N
ATOM	47	N	ARG A	10	-1.181	-11.070	-7.134	1.00	26.61	N
ATOM	48	CA	ARG A	10	-0.934	-9.977	-6.211	1.00	26.64	C
ATOM	49	C	ARG A	10	-0.481	-8.776	-7.042	1.00	26.73	C
ATOM	50	O	ARG A	10	-1.080	-7.701	-6.952	1.00	26.46	O
ATOM	51	CB	ARG A	10	0.123	-10.384	-5.179	1.00	25.45	C
ATOM	52	CG	ARG A	10	-0.411	-11.233	-3.973	1.00	26.28	C
ATOM	53	CD	ARG A	10	-1.808	-11.885	-4.176	1.00	22.90	C
ATOM	54	NE	ARG A	10	-2.565	-11.999	-2.920	1.00	22.44	N
ATOM	55	CZ	ARG A	10	-3.843	-12.387	-2.815	1.00	23.29	C
ATOM	56	NH1	ARG A	10	-4.491	-12.934	-3.836	1.00	20.37	N1+
ATOM	57	NH2	ARG A	10	-4.460	-12.295	-1.650	1.00	22.05	N
ATOM	58	N	PHE A	11	0.332	-9.061	-8.061	1.00	27.91	N
ATOM	59	CA	PHE A	11	0.735	-8.053	-9.045	1.00	25.84	C
ATOM	60	C	PHE A	11	-0.452	-7.383	-9.727	1.00	24.74	C
ATOM	61	O	PHE A	11	-0.444	-6.168	-9.938	1.00	25.29	O
ATOM	62	CB	PHE A	11	1.652	-8.664	-10.105	1.00	24.40	C
ATOM	63	CG	PHE A	11	2.851	-7.809	-10.430	1.00	27.14	C
ATOM	64	CD1	PHE A	11	2.762	-6.785	-11.368	1.00	26.91	C
ATOM	65	CD2	PHE A	11	4.042	-7.965	-9.728	1.00	26.00	C
ATOM	66	CE1	PHE A	11	3.829	-5.934	-11.585	1.00	27.01	C
ATOM	67	CE2	PHE A	11	5.115	-7.111	-9.945	1.00	25.82	C
ATOM	68	CZ	PHE A	11	5.009	-6.095	-10.871	1.00	25.28	C

ATOM	69	N	LYS	A	12	-1.530	-8.136	-9.903	1.00	23.91	N
ATOM	70	CA	LYS	A	12	-2.692	-7.668	-10.651	1.00	22.95	C
ATOM	71	C	LYS	A	12	-3.685	-6.841	-9.819	1.00	22.94	C
ATOM	72	O	LYS	A	12	-4.825	-6.624	-10.255	1.00	22.98	O
ATOM	73	CB	LYS	A	12	-3.449	-8.860	-11.267	1.00	23.41	C
ATOM	74	CG	LYS	A	12	-2.859	-9.489	-12.523	1.00	18.48	C
ATOM	75	CD	LYS	A	12	-3.793	-10.579	-13.069	1.00	15.47	C
ATOM	76	CE	LYS	A	12	-3.024	-11.641	-13.836	1.00	13.47	C
ATOM	77	NZ	LYS	A	12	-2.824	-11.308	-15.273	1.00	12.20	N1+
ATOM	78	N	ASP	A	13	-3.313	-6.444	-8.606	1.00	22.30	N
ATOM	79	CA	ASP	A	13	-4.140	-5.462	-7.897	1.00	22.25	C
ATOM	80	C	ASP	A	13	-3.358	-4.266	-7.363	1.00	20.77	C
ATOM	81	O	ASP	A	13	-3.612	-3.114	-7.758	1.00	18.06	O
ATOM	82	CB	ASP	A	13	-4.929	-6.102	-6.748	1.00	27.23	C
ATOM	83	CG	ASP	A	13	-4.846	-7.609	-6.734	1.00	30.68	C
ATOM	84	OD1	ASP	A	13	-3.712	-8.130	-6.758	1.00	31.81	O
ATOM	85	OD2	ASP	A	13	-5.905	-8.262	-6.569	1.00	31.63	O1-
ATOM	86	N	LEU	A	14	-2.360	-4.555	-6.527	1.00	19.90	N
ATOM	87	CA	LEU	A	14	-1.567	-3.530	-5.840	1.00	19.12	C
ATOM	88	C	LEU	A	14	-0.542	-2.906	-6.802	1.00	21.59	C
ATOM	89	O	LEU	A	14	0.414	-2.214	-6.388	1.00	20.70	O
ATOM	90	CB	LEU	A	14	-0.867	-4.154	-4.625	1.00	16.73	C
ATOM	91	CG	LEU	A	14	0.256	-5.186	-4.824	1.00	15.13	C
ATOM	92	CD1	LEU	A	14	1.447	-4.781	-3.981	1.00	11.65	C
ATOM	93	CD2	LEU	A	14	-0.189	-6.568	-4.441	1.00	11.37	C
ATOM	94	N	GLY	A	15	-0.829	-3.065	-8.092	1.00	21.89	N
ATOM	95	CA	GLY	A	15	0.087	-2.683	-9.140	1.00	23.39	C
ATOM	96	C	GLY	A	15	1.491	-3.220	-8.965	1.00	24.62	C
ATOM	97	O	GLY	A	15	1.700	-4.264	-8.353	1.00	23.01	O
ATOM	98	N	GLU	A	16	2.457	-2.395	-9.367	1.00	26.22	N
ATOM	99	CA	GLU	A	16	3.837	-2.809	-9.504	1.00	25.91	C
ATOM	100	C	GLU	A	16	4.725	-2.038	-8.535	1.00	27.19	C
ATOM	101	O	GLU	A	16	5.421	-2.680	-7.760	1.00	26.80	O
ATOM	102	CB	GLU	A	16	4.282	-2.641	-10.966	1.00	27.05	C
ATOM	103	CG	GLU	A	16	5.730	-2.204	-11.175	1.00	28.89	C
ATOM	104	CD	GLU	A	16	6.302	-2.613	-12.537	1.00	29.95	C
ATOM	105	OE1	GLU	A	16	5.637	-2.398	-13.596	1.00	28.27	O
ATOM	106	OE2	GLU	A	16	7.444	-3.137	-12.531	1.00	28.17	O1-
ATOM	107	N	GLU	A	17	4.596	-0.699	-8.451	1.00	30.38	N
ATOM	108	CA	GLU	A	17	5.444	0.099	-7.520	1.00	30.91	C
ATOM	109	C	GLU	A	17	5.306	-0.525	-6.158	1.00	32.10	C
ATOM	110	O	GLU	A	17	6.187	-1.268	-5.730	1.00	34.11	O
ATOM	111	CB	GLU	A	17	5.044	1.589	-7.404	1.00	28.23	C
ATOM	112	CG	GLU	A	17	6.165	2.451	-6.706	1.00	30.17	C
ATOM	113	CD	GLU	A	17	5.688	3.762	-5.967	1.00	32.12	C
ATOM	114	OE1	GLU	A	17	5.082	4.666	-6.598	1.00	30.67	O
ATOM	115	OE2	GLU	A	17	6.027	3.939	-4.760	1.00	31.49	O1-
ATOM	116	N	ASN	A	18	4.054	-0.563	-5.720	1.00	33.09	N
ATOM	117	CA	ASN	A	18	3.696	-1.121	-4.420	1.00	32.50	C
ATOM	118	C	ASN	A	18	3.913	-2.668	-4.325	1.00	31.11	C
ATOM	119	O	ASN	A	18	3.947	-3.231	-3.212	1.00	30.55	O
ATOM	120	CB	ASN	A	18	2.249	-0.690	-4.057	1.00	31.08	C
ATOM	121	CG	ASN	A	18	2.086	0.851	-3.988	1.00	28.14	C
ATOM	122	ND2	ASN	A	18	0.918	1.344	-4.361	1.00	28.12	N
ATOM	123	OD1	ASN	A	18	3.018	1.572	-3.648	1.00	24.14	O
ATOM	124	N	PHE	A	19	4.287	-3.307	-5.437	1.00	27.36	N
ATOM	125	CA	PHE	A	19	4.761	-4.691	-5.361	1.00	25.30	C
ATOM	126	C	PHE	A	19	6.240	-4.636	-5.071	1.00	25.50	C
ATOM	127	O	PHE	A	19	6.703	-5.188	-4.078	1.00	26.44	O
ATOM	128	CB	PHE	A	19	4.513	-5.455	-6.667	1.00	24.34	C
ATOM	129	CG	PHE	A	19	4.448	-6.959	-6.504	1.00	21.73	C
ATOM	130	CD1	PHE	A	19	5.594	-7.720	-6.488	1.00	21.65	C
ATOM	131	CD2	PHE	A	19	3.236	-7.616	-6.507	1.00	21.52	C
ATOM	132	CE1	PHE	A	19	5.532	-9.106	-6.486	1.00	18.58	C
ATOM	133	CE2	PHE	A	19	3.175	-8.997	-6.508	1.00	20.40	C
ATOM	134	CZ	PHE	A	19	4.328	-9.738	-6.499	1.00	18.31	C
ATOM	135	N	LYS	A	20	6.957	-3.831	-5.839	1.00	24.36	N
ATOM	136	CA	LYS	A	20	8.340	-3.545	-5.501	1.00	26.07	C
ATOM	137	C	LYS	A	20	8.335	-3.055	-4.053	1.00	26.27	C
ATOM	138	O	LYS	A	20	9.090	-3.567	-3.221	1.00	25.42	O
ATOM	139	CB	LYS	A	20	8.921	-2.458	-6.432	1.00	27.79	C

ATOM	140	CG	LYS	A	20	9.948	-2.952	-7.490	1.00	26.76	C
ATOM	141	CD	LYS	A	20	9.952	-2.041	-8.743	1.00	22.31	C
ATOM	142	CE	LYS	A	20	10.898	-2.548	-9.824	1.00	20.10	C
ATOM	143	NZ	LYS	A	20	12.337	-2.566	-9.387	1.00	19.71	N1+
ATOM	144	N	ALA	A	21	7.287	-2.301	-3.711	1.00	26.57	N
ATOM	145	CA	ALA	A	21	7.264	-1.504	-2.480	1.00	25.54	C
ATOM	146	C	ALA	A	21	7.045	-2.381	-1.289	1.00	23.24	C
ATOM	147	O	ALA	A	21	7.661	-2.178	-0.261	1.00	24.58	O
ATOM	148	CB	ALA	A	21	6.188	-0.411	-2.539	1.00	24.10	C
ATOM	149	N	LEU	A	22	6.251	-3.422	-1.444	1.00	22.80	N
ATOM	150	CA	LEU	A	22	6.151	-4.371	-0.353	1.00	23.66	C
ATOM	151	C	LEU	A	22	7.414	-5.226	-0.300	1.00	22.00	C
ATOM	152	O	LEU	A	22	8.277	-4.987	0.543	1.00	22.37	O
ATOM	153	CB	LEU	A	22	4.892	-5.242	-0.489	1.00	25.44	C
ATOM	154	CG	LEU	A	22	3.648	-4.849	0.324	1.00	23.88	C
ATOM	155	CD1	LEU	A	22	4.053	-4.132	1.586	1.00	21.55	C
ATOM	156	CD2	LEU	A	22	2.740	-3.964	-0.500	1.00	23.25	C
ATOM	157	N	VAL	A	23	7.649	-5.965	-1.382	1.00	19.37	N
ATOM	158	CA	VAL	A	23	8.590	-7.075	-1.410	1.00	16.76	C
ATOM	159	C	VAL	A	23	10.018	-6.698	-0.945	1.00	18.40	C
ATOM	160	O	VAL	A	23	10.734	-7.519	-0.372	1.00	17.50	O
ATOM	161	CB	VAL	A	23	8.579	-7.698	-2.823	1.00	15.62	C
ATOM	162	CG1	VAL	A	23	9.429	-8.950	-2.878	1.00	13.90	C
ATOM	163	CG2	VAL	A	23	7.157	-8.040	-3.211	1.00	9.89	C
ATOM	164	N	LEU	A	24	10.336	-5.412	-0.999	1.00	20.80	N
ATOM	165	CA	LEU	A	24	11.503	-4.879	-0.319	1.00	21.23	C
ATOM	166	C	LEU	A	24	11.278	-4.949	1.182	1.00	22.45	C
ATOM	167	O	LEU	A	24	11.885	-5.812	1.826	1.00	25.32	O
ATOM	168	CB	LEU	A	24	11.767	-3.434	-0.729	1.00	23.94	C
ATOM	169	CG	LEU	A	24	13.205	-2.910	-0.666	1.00	25.01	C
ATOM	170	CD1	LEU	A	24	13.154	-1.397	-0.414	1.00	24.47	C
ATOM	171	CD2	LEU	A	24	14.017	-3.618	0.417	1.00	24.82	C
ATOM	172	N	ILE	A	25	10.410	-4.100	1.756	1.00	21.80	N
ATOM	173	CA	ILE	A	25	10.241	-4.122	3.238	1.00	22.89	C
ATOM	174	C	ILE	A	25	10.125	-5.571	3.747	1.00	23.14	C
ATOM	175	O	ILE	A	25	10.935	-5.997	4.564	1.00	20.48	O
ATOM	176	CB	ILE	A	25	8.993	-3.319	3.785	1.00	19.69	C
ATOM	177	CG1	ILE	A	25	7.714	-3.751	3.081	1.00	18.78	C
ATOM	178	CG2	ILE	A	25	9.220	-1.841	3.691	1.00	14.48	C
ATOM	179	CD1	ILE	A	25	6.793	-2.619	2.745	1.00	19.12	C
ATOM	180	N	ALA	A	26	9.289	-6.364	3.071	1.00	23.61	N
ATOM	181	CA	ALA	A	26	9.182	-7.799	3.320	1.00	24.15	C
ATOM	182	C	ALA	A	26	10.563	-8.405	3.520	1.00	24.53	C
ATOM	183	O	ALA	A	26	10.954	-8.689	4.649	1.00	24.25	O
ATOM	184	CB	ALA	A	26	8.475	-8.487	2.149	1.00	23.75	C
ATOM	185	N	PHE	A	27	11.367	-8.391	2.458	1.00	25.34	N
ATOM	186	CA	PHE	A	27	12.700	-8.999	2.472	1.00	23.54	C
ATOM	187	C	PHE	A	27	13.657	-8.301	3.432	1.00	21.84	C
ATOM	188	O	PHE	A	27	14.755	-8.811	3.685	1.00	21.92	O
ATOM	189	CB	PHE	A	27	13.312	-8.985	1.067	1.00	22.66	C
ATOM	190	CG	PHE	A	27	12.781	-10.058	0.157	1.00	21.80	C
ATOM	191	CD1	PHE	A	27	12.742	-11.375	0.562	1.00	22.31	C
ATOM	192	CD2	PHE	A	27	12.383	-9.753	-1.130	1.00	19.87	C
ATOM	193	CE1	PHE	A	27	12.309	-12.365	-0.311	1.00	23.11	C
ATOM	194	CE2	PHE	A	27	11.955	-10.733	-1.999	1.00	17.81	C
ATOM	195	CZ	PHE	A	27	11.914	-12.034	-1.595	1.00	20.05	C
ATOM	196	N	ALA	A	28	13.258	-7.145	3.956	1.00	19.72	N
ATOM	197	CA	ALA	A	28	14.162	-6.345	4.775	1.00	20.10	C
ATOM	198	C	ALA	A	28	13.699	-5.958	6.201	1.00	21.53	C
ATOM	199	O	ALA	A	28	14.345	-5.141	6.856	1.00	21.18	O
ATOM	200	CB	ALA	A	28	14.589	-5.111	4.002	1.00	19.50	C
ATOM	201	N	GLN	A	29	12.557	-6.484	6.644	1.00	22.14	N
ATOM	202	CA	GLN	A	29	12.293	-6.695	8.068	1.00	19.68	C
ATOM	203	C	GLN	A	29	12.975	-8.025	8.333	1.00	22.08	C
ATOM	204	O	GLN	A	29	13.984	-8.084	9.029	1.00	21.67	O
ATOM	205	CB	GLN	A	29	10.785	-6.840	8.336	1.00	15.49	C
ATOM	206	CG	GLN	A	29	9.953	-5.582	8.068	1.00	16.39	C
ATOM	207	CD	GLN	A	29	8.445	-5.805	8.202	1.00	17.09	C
ATOM	208	NE2	GLN	A	29	7.699	-4.724	8.411	1.00	12.64	N
ATOM	209	OE1	GLN	A	29	7.959	-6.934	8.092	1.00	19.84	O
ATOM	210	N	TYR	A	30	12.622	-8.974	7.462	1.00	24.94	N

ATOM	211	CA	TYR	A	30	13.071	-10.369	7.483	1.00	23.92	C
ATOM	212	C	TYR	A	30	14.537	-10.604	7.852	1.00	24.37	C
ATOM	213	O	TYR	A	30	14.813	-11.198	8.911	1.00	26.54	O
ATOM	214	CB	TYR	A	30	12.785	-11.008	6.129	1.00	22.66	C
ATOM	215	CG	TYR	A	30	11.456	-11.702	6.058	1.00	24.59	C
ATOM	216	CD1	TYR	A	30	11.236	-12.867	6.775	1.00	26.93	C
ATOM	217	CD2	TYR	A	30	10.448	-11.251	5.218	1.00	25.02	C
ATOM	218	CE1	TYR	A	30	10.052	-13.584	6.651	1.00	27.16	C
ATOM	219	CE2	TYR	A	30	9.253	-11.953	5.082	1.00	26.54	C
ATOM	220	CZ	TYR	A	30	9.068	-13.128	5.798	1.00	27.87	C
ATOM	221	OH	TYR	A	30	7.931	-13.888	5.629	1.00	28.25	O
ATOM	222	N	LEU	A	31	15.469	-10.188	6.982	1.00	19.65	N
ATOM	223	CA	LEU	A	31	16.893	-10.427	7.227	1.00	16.82	C
ATOM	224	C	LEU	A	31	17.698	-9.262	7.838	1.00	16.70	C
ATOM	225	O	LEU	A	31	18.814	-9.467	8.332	1.00	16.93	O
ATOM	226	CB	LEU	A	31	17.569	-10.920	5.949	1.00	18.70	C
ATOM	227	CG	LEU	A	31	17.564	-12.423	5.628	1.00	18.34	C
ATOM	228	CD1	LEU	A	31	18.751	-12.798	4.728	1.00	16.70	C
ATOM	229	CD2	LEU	A	31	17.629	-13.188	6.913	1.00	17.85	C
ATOM	230	N	GLN	A	32	17.196	-8.040	7.703	1.00	12.99	N
ATOM	231	CA	GLN	A	32	17.563	-6.922	8.579	1.00	15.39	C
ATOM	232	C	GLN	A	32	19.015	-6.620	9.024	1.00	16.50	C
ATOM	233	O	GLN	A	32	19.233	-5.706	9.832	1.00	16.68	O
ATOM	234	CB	GLN	A	32	16.647	-6.914	9.830	1.00	17.32	C
ATOM	235	CG	GLN	A	32	16.825	-8.056	10.882	1.00	18.77	C
ATOM	236	CD	GLN	A	32	16.438	-7.610	12.302	1.00	19.47	C
ATOM	237	NE2	GLN	A	32	17.197	-8.054	13.301	1.00	11.37	N
ATOM	238	OE1	GLN	A	32	15.564	-6.759	12.468	1.00	21.08	O
ATOM	239	N	GLN	A	33	20.018	-7.295	8.474	1.00	17.10	N
ATOM	240	CA	GLN	A	33	21.399	-6.839	8.685	1.00	18.29	C
ATOM	241	C	GLN	A	33	22.190	-6.783	7.353	1.00	19.96	C
ATOM	242	O	GLN	A	33	22.912	-5.816	7.095	1.00	20.35	O
ATOM	243	CB	GLN	A	33	22.119	-7.705	9.752	1.00	16.98	C
ATOM	244	CG	GLN	A	33	21.184	-8.265	10.879	1.00	21.56	C
ATOM	245	CD	GLN	A	33	21.643	-7.989	12.350	1.00	23.80	C
ATOM	246	NE2	GLN	A	33	22.932	-7.685	12.533	1.00	26.50	N
ATOM	247	OE1	GLN	A	33	20.834	-8.040	13.295	1.00	19.44	O
ATOM	248	N	CYS	A	34	21.943	-7.745	6.458	1.00	20.58	N
ATOM	249	CA	CYS	A	34	22.517	-7.742	5.113	1.00	18.89	C
ATOM	250	C	CYS	A	34	22.254	-6.421	4.403	1.00	20.26	C
ATOM	251	O	CYS	A	34	21.094	-5.970	4.313	1.00	18.49	O
ATOM	252	CB	CYS	A	34	21.906	-8.857	4.277	1.00	17.31	C
ATOM	253	SG	CYS	A	34	22.155	-10.502	4.964	1.00	28.19	S
ATOM	254	N	PRO	A	35	23.309	-5.836	3.795	1.00	19.86	N
ATOM	255	CA	PRO	A	35	23.265	-4.593	3.019	1.00	16.08	C
ATOM	256	C	PRO	A	35	22.189	-4.451	1.981	1.00	13.85	C
ATOM	257	O	PRO	A	35	21.368	-5.324	1.779	1.00	11.96	O
ATOM	258	CB	PRO	A	35	24.648	-4.512	2.420	1.00	14.75	C
ATOM	259	CG	PRO	A	35	25.491	-4.991	3.508	1.00	21.60	C
ATOM	260	CD	PRO	A	35	24.692	-6.116	4.215	1.00	21.49	C
ATOM	261	N	PHE	A	36	22.110	-3.257	1.430	1.00	16.85	N
ATOM	262	CA	PHE	A	36	20.988	-2.926	0.602	1.00	17.73	C
ATOM	263	C	PHE	A	36	20.944	-3.782	-0.646	1.00	20.98	C
ATOM	264	O	PHE	A	36	20.009	-4.576	-0.789	1.00	24.39	O
ATOM	265	CB	PHE	A	36	20.979	-1.443	0.233	1.00	18.53	C
ATOM	266	CG	PHE	A	36	19.674	-0.996	-0.359	1.00	19.96	C
ATOM	267	CD1	PHE	A	36	18.482	-1.376	0.223	1.00	18.68	C
ATOM	268	CD2	PHE	A	36	19.632	-0.366	-1.579	1.00	20.99	C
ATOM	269	CE1	PHE	A	36	17.308	-1.164	-0.391	1.00	17.22	C
ATOM	270	CE2	PHE	A	36	18.443	-0.149	-2.195	1.00	19.46	C
ATOM	271	CZ	PHE	A	36	17.282	-0.559	-1.600	1.00	19.20	C
ATOM	272	N	GLU	A	37	21.990	-3.721	-1.482	1.00	21.10	N
ATOM	273	CA	GLU	A	37	21.895	-4.190	-2.874	1.00	20.88	C
ATOM	274	C	GLU	A	37	21.529	-5.668	-3.024	1.00	20.33	C
ATOM	275	O	GLU	A	37	20.863	-6.060	-3.979	1.00	18.29	O
ATOM	276	CB	GLU	A	37	23.192	-3.914	-3.617	1.00	22.94	C
ATOM	277	CG	GLU	A	37	23.564	-2.453	-3.675	1.00	24.70	C
ATOM	278	CD	GLU	A	37	24.725	-2.103	-2.759	1.00	27.37	C
ATOM	279	OE1	GLU	A	37	25.368	-3.042	-2.215	1.00	26.97	O
ATOM	280	OE2	GLU	A	37	24.966	-0.880	-2.567	1.00	25.74	O1-
ATOM	281	N	ASP	A	38	22.115	-6.488	-2.161	1.00	20.03	N

ATOM	282	CA	ASP	A	38	21.747	-7.891	-1.979	1.00	18.25	C
ATOM	283	C	ASP	A	38	20.224	-8.028	-1.946	1.00	20.19	C
ATOM	284	O	ASP	A	38	19.615	-8.679	-2.800	1.00	17.87	O
ATOM	285	CB	ASP	A	38	22.348	-8.378	-0.663	1.00	16.94	C
ATOM	286	CG	ASP	A	38	23.796	-7.902	-0.463	1.00	18.58	C
ATOM	287	OD1	ASP	A	38	24.047	-6.683	-0.383	1.00	14.38	O
ATOM	288	OD2	ASP	A	38	24.696	-8.758	-0.380	1.00	22.12	O1-
ATOM	289	N	HIS	A	39	19.612	-7.271	-1.038	1.00	23.52	N
ATOM	290	CA	HIS	A	39	18.160	-7.214	-0.882	1.00	22.04	C
ATOM	291	C	HIS	A	39	17.507	-6.768	-2.173	1.00	20.54	C
ATOM	292	O	HIS	A	39	16.482	-7.318	-2.558	1.00	21.75	O
ATOM	293	CB	HIS	A	39	17.765	-6.228	0.235	1.00	22.52	C
ATOM	294	CG	HIS	A	39	17.962	-6.765	1.616	1.00	21.90	C
ATOM	295	CD2	HIS	A	39	17.572	-7.930	2.183	1.00	22.42	C
ATOM	296	ND1	HIS	A	39	18.606	-6.054	2.609	1.00	23.78	N
ATOM	297	CE1	HIS	A	39	18.596	-6.759	3.729	1.00	21.46	C
ATOM	298	NE2	HIS	A	39	17.980	-7.900	3.492	1.00	22.35	N
ATOM	299	N	VAL	A	40	18.052	-5.725	-2.797	1.00	17.74	N
ATOM	300	CA	VAL	A	40	17.394	-5.125	-3.959	1.00	17.68	C
ATOM	301	C	VAL	A	40	17.509	-5.956	-5.264	1.00	21.04	C
ATOM	302	O	VAL	A	40	16.509	-6.136	-5.967	1.00	22.22	O
ATOM	303	CB	VAL	A	40	17.863	-3.667	-4.225	1.00	15.09	C
ATOM	304	CG1	VAL	A	40	16.681	-2.748	-4.220	1.00	15.66	C
ATOM	305	CG2	VAL	A	40	18.816	-3.204	-3.185	1.00	12.61	C
ATOM	306	N	LYS	A	41	18.664	-6.575	-5.518	1.00	21.82	N
ATOM	307	CA	LYS	A	41	18.789	-7.519	-6.630	1.00	21.46	C
ATOM	308	C	LYS	A	41	17.644	-8.486	-6.523	1.00	21.01	C
ATOM	309	O	LYS	A	41	16.769	-8.480	-7.376	1.00	23.65	O
ATOM	310	CB	LYS	A	41	20.108	-8.290	-6.546	1.00	25.68	C
ATOM	311	CG	LYS	A	41	20.620	-8.833	-7.888	1.00	27.49	C
ATOM	312	CD	LYS	A	41	22.165	-8.736	-8.020	1.00	23.95	C
ATOM	313	CE	LYS	A	41	22.573	-8.660	-9.504	1.00	21.47	C
ATOM	314	NZ	LYS	A	41	23.966	-8.207	-9.722	1.00	16.15	N1+
ATOM	315	N	LEU	A	42	17.495	-9.053	-5.324	1.00	21.14	N
ATOM	316	CA	LEU	A	42	16.451	-10.045	-5.020	1.00	20.21	C
ATOM	317	C	LEU	A	42	15.021	-9.526	-5.193	1.00	18.80	C
ATOM	318	O	LEU	A	42	14.119	-10.252	-5.621	1.00	14.06	O
ATOM	319	CB	LEU	A	42	16.653	-10.582	-3.604	1.00	20.68	C
ATOM	320	CG	LEU	A	42	18.057	-11.154	-3.410	1.00	23.93	C
ATOM	321	CD1	LEU	A	42	18.337	-11.363	-1.954	1.00	26.48	C
ATOM	322	CD2	LEU	A	42	18.195	-12.468	-4.155	1.00	27.94	C
ATOM	323	N	VAL	A	43	14.828	-8.248	-4.920	1.00	20.91	N
ATOM	324	CA	VAL	A	43	13.557	-7.646	-5.243	1.00	25.09	C
ATOM	325	C	VAL	A	43	13.455	-7.618	-6.756	1.00	24.80	C
ATOM	326	O	VAL	A	43	12.655	-8.371	-7.319	1.00	24.61	O
ATOM	327	CB	VAL	A	43	13.424	-6.220	-4.671	1.00	29.14	C
ATOM	328	CG1	VAL	A	43	12.078	-5.628	-5.086	1.00	29.20	C
ATOM	329	CG2	VAL	A	43	13.555	-6.252	-3.122	1.00	29.89	C
ATOM	330	N	ASN	A	44	14.422	-6.952	-7.393	1.00	24.28	N
ATOM	331	CA	ASN	A	44	14.472	-6.794	-8.849	1.00	24.67	C
ATOM	332	C	ASN	A	44	13.983	-8.073	-9.527	1.00	25.13	C
ATOM	333	O	ASN	A	44	13.160	-8.021	-10.443	1.00	27.80	O
ATOM	334	CB	ASN	A	44	15.908	-6.461	-9.325	1.00	25.32	C
ATOM	335	CG	ASN	A	44	16.357	-5.040	-8.947	1.00	29.48	C
ATOM	336	ND2	ASN	A	44	15.803	-4.049	-9.631	1.00	31.83	N
ATOM	337	OD1	ASN	A	44	17.192	-4.838	-8.052	1.00	30.17	O
ATOM	338	N	GLU	A	45	14.326	-9.217	-8.942	1.00	24.11	N
ATOM	339	CA	GLU	A	45	14.019	-10.503	-9.553	1.00	25.12	C
ATOM	340	C	GLU	A	45	12.569	-10.992	-9.356	1.00	26.68	C
ATOM	341	O	GLU	A	45	11.931	-11.464	-10.315	1.00	26.81	O
ATOM	342	CB	GLU	A	45	15.015	-11.547	-9.043	1.00	22.72	C
ATOM	343	CG	GLU	A	45	16.351	-11.537	-9.773	1.00	16.42	C
ATOM	344	CD	GLU	A	45	17.486	-11.808	-8.848	1.00	12.41	C
ATOM	345	OE1	GLU	A	45	17.454	-12.854	-8.182	1.00	8.42	O
ATOM	346	OE2	GLU	A	45	18.353	-10.928	-8.705	1.00	12.61	O1-
ATOM	347	N	VAL	A	46	12.105	-10.980	-8.100	1.00	28.78	N
ATOM	348	CA	VAL	A	46	10.677	-11.141	-7.758	1.00	27.45	C
ATOM	349	C	VAL	A	46	9.849	-10.270	-8.670	1.00	25.30	C
ATOM	350	O	VAL	A	46	8.937	-10.754	-9.344	1.00	24.88	O
ATOM	351	CB	VAL	A	46	10.352	-10.637	-6.332	1.00	28.88	C
ATOM	352	CG1	VAL	A	46	8.928	-11.039	-5.958	1.00	28.73	C

ATOM	353	CG2	VAL	A	46	11.381	-11.152	-5.327	1.00	30.37	C
ATOM	354	N	THR	A	47	10.115	-8.966	-8.588	1.00	22.75	N
ATOM	355	CA	THR	A	47	9.506	-7.984	-9.460	1.00	21.85	C
ATOM	356	C	THR	A	47	9.418	-8.500	-10.909	1.00	24.34	C
ATOM	357	O	THR	A	47	8.328	-8.429	-11.517	1.00	23.89	O
ATOM	358	CB	THR	A	47	10.293	-6.653	-9.427	1.00	20.39	C
ATOM	359	CG2	THR	A	47	9.430	-5.527	-9.894	1.00	22.88	C
ATOM	360	OG1	THR	A	47	10.696	-6.351	-8.090	1.00	18.42	O
ATOM	361	N	GLU	A	48	10.502	-9.131	-11.402	1.00	24.26	N
ATOM	362	CA	GLU	A	48	10.540	-9.677	-12.778	1.00	25.92	C
ATOM	363	C	GLU	A	48	9.432	-10.732	-13.024	1.00	26.47	C
ATOM	364	O	GLU	A	48	8.254	-10.386	-13.267	1.00	21.91	O
ATOM	365	CB	GLU	A	48	11.920	-10.285	-13.101	1.00	25.59	C
ATOM	366	CG	GLU	A	48	12.994	-9.275	-13.584	1.00	34.29	C
ATOM	367	CD	GLU	A	48	13.681	-9.665	-14.925	1.00	37.71	C
ATOM	368	OE1	GLU	A	48	14.662	-10.459	-14.916	1.00	37.81	O
ATOM	369	OE2	GLU	A	48	13.290	-9.109	-15.986	1.00	39.96	O1-
ATOM	370	N	PHE	A	49	9.865	-11.982	-13.195	1.00	26.44	N
ATOM	371	CA	PHE	A	49	9.041	-13.162	-12.909	1.00	26.68	C
ATOM	372	C	PHE	A	49	7.528	-12.915	-12.813	1.00	27.60	C
ATOM	373	O	PHE	A	49	6.732	-13.630	-13.444	1.00	27.93	O
ATOM	374	CB	PHE	A	49	9.534	-13.796	-11.611	1.00	23.99	C
ATOM	375	CG	PHE	A	49	9.256	-15.241	-11.510	1.00	22.41	C
ATOM	376	CD1	PHE	A	49	8.042	-15.760	-11.905	1.00	25.30	C
ATOM	377	CD2	PHE	A	49	10.177	-16.079	-10.948	1.00	23.15	C
ATOM	378	CE1	PHE	A	49	7.754	-17.099	-11.725	1.00	26.44	C
ATOM	379	CE2	PHE	A	49	9.893	-17.410	-10.766	1.00	26.07	C
ATOM	380	CZ	PHE	A	49	8.682	-17.917	-11.151	1.00	23.64	C
ATOM	381	N	ALA	A	50	7.147	-12.051	-11.869	1.00	28.68	N
ATOM	382	CA	ALA	A	50	5.757	-11.693	-11.611	1.00	26.29	C
ATOM	383	C	ALA	A	50	5.093	-11.370	-12.939	1.00	26.64	C
ATOM	384	O	ALA	A	50	4.068	-11.963	-13.302	1.00	25.34	O
ATOM	385	CB	ALA	A	50	5.717	-10.487	-10.704	1.00	22.98	C
ATOM	386	N	LYS	A	51	5.773	-10.515	-13.703	1.00	26.55	N
ATOM	387	CA	LYS	A	51	5.334	-10.065	-15.024	1.00	24.67	C
ATOM	388	C	LYS	A	51	5.138	-11.225	-15.983	1.00	23.19	C
ATOM	389	O	LYS	A	51	4.298	-11.140	-16.871	1.00	22.00	O
ATOM	390	CB	LYS	A	51	6.366	-9.099	-15.636	1.00	25.82	C
ATOM	391	CG	LYS	A	51	6.392	-7.692	-15.057	1.00	20.83	C
ATOM	392	CD	LYS	A	51	7.753	-7.062	-15.237	1.00	15.07	C
ATOM	393	CE	LYS	A	51	7.799	-5.778	-14.475	1.00	17.03	C
ATOM	394	NZ	LYS	A	51	7.346	-5.991	-13.051	1.00	19.85	N1+
ATOM	395	N	THR	A	52	5.942	-12.276	-15.844	1.00	20.21	N
ATOM	396	CA	THR	A	52	5.860	-13.406	-16.750	1.00	20.84	C
ATOM	397	C	THR	A	52	4.763	-14.438	-16.407	1.00	23.73	C
ATOM	398	O	THR	A	52	4.255	-15.121	-17.310	1.00	25.44	O
ATOM	399	CB	THR	A	52	7.233	-14.084	-16.902	1.00	18.84	C
ATOM	400	CG2	THR	A	52	7.234	-15.510	-16.319	1.00	15.42	C
ATOM	401	OG1	THR	A	52	7.585	-14.107	-18.292	1.00	18.38	O
ATOM	402	N	CYS	A	53	4.305	-14.468	-15.154	1.00	24.15	N
ATOM	403	CA	CYS	A	53	3.020	-15.113	-14.852	1.00	23.39	C
ATOM	404	C	CYS	A	53	1.841	-14.134	-15.054	1.00	21.30	C
ATOM	405	O	CYS	A	53	0.704	-14.552	-15.268	1.00	21.30	O
ATOM	406	CB	CYS	A	53	3.000	-15.710	-13.428	1.00	24.03	C
ATOM	407	SG	CYS	A	53	4.336	-16.896	-13.023	1.00	22.23	S
ATOM	408	N	VAL	A	54	2.135	-12.843	-15.077	1.00	19.83	N
ATOM	409	CA	VAL	A	54	1.222	-11.856	-15.647	1.00	23.85	C
ATOM	410	C	VAL	A	54	0.895	-12.233	-17.099	1.00	24.27	C
ATOM	411	O	VAL	A	54	-0.282	-12.282	-17.504	1.00	24.50	O
ATOM	412	CB	VAL	A	54	1.865	-10.426	-15.619	1.00	26.97	C
ATOM	413	CG1	VAL	A	54	1.309	-9.538	-16.746	1.00	26.12	C
ATOM	414	CG2	VAL	A	54	1.638	-9.771	-14.250	1.00	30.36	C
ATOM	415	N	ALA	A	55	1.952	-12.457	-17.881	1.00	22.66	N
ATOM	416	CA	ALA	A	55	1.845	-12.830	-19.291	1.00	20.65	C
ATOM	417	C	ALA	A	55	0.971	-14.066	-19.412	1.00	21.32	C
ATOM	418	O	ALA	A	55	0.002	-14.111	-20.189	1.00	20.09	O
ATOM	419	CB	ALA	A	55	3.235	-13.120	-19.850	1.00	18.03	C
ATOM	420	N	ASP	A	56	1.236	-14.994	-18.498	1.00	22.03	N
ATOM	421	CA	ASP	A	56	0.765	-16.364	-18.591	1.00	20.78	C
ATOM	422	C	ASP	A	56	0.823	-16.974	-17.200	1.00	17.21	C
ATOM	423	O	ASP	A	56	1.892	-17.299	-16.698	1.00	13.60	O

ATOM	424	CB	ASP	A	56	1.667	-17.168	-19.555	1.00	21.11	C
ATOM	425	CG	ASP	A	56	0.882	-17.885	-20.641	1.00	20.85	C
ATOM	426	OD1	ASP	A	56	-0.136	-17.326	-21.131	1.00	18.50	O
ATOM	427	OD2	ASP	A	56	1.283	-19.021	-20.979	1.00	19.93	O1-
ATOM	428	N	GLU	A	57	-0.326	-17.055	-16.554	1.00	17.39	N
ATOM	429	CA	GLU	A	57	-0.486	-17.952	-15.418	1.00	19.41	C
ATOM	430	C	GLU	A	57	0.281	-19.246	-15.683	1.00	19.69	C
ATOM	431	O	GLU	A	57	1.357	-19.437	-15.115	1.00	18.89	O
ATOM	432	CB	GLU	A	57	-1.968	-18.291	-15.198	1.00	21.01	C
ATOM	433	CG	GLU	A	57	-2.926	-17.181	-15.550	1.00	18.07	C
ATOM	434	CD	GLU	A	57	-3.521	-16.521	-14.336	1.00	21.55	C
ATOM	435	OE1	GLU	A	57	-2.782	-15.874	-13.551	1.00	18.91	O
ATOM	436	OE2	GLU	A	57	-4.756	-16.620	-14.200	1.00	23.50	O1-
ATOM	437	N	SER	A	58	-0.138	-19.944	-16.752	1.00	20.54	N
ATOM	438	CA	SER	A	58	0.233	-21.343	-17.074	1.00	18.77	C
ATOM	439	C	SER	A	58	1.734	-21.685	-17.200	1.00	16.17	C
ATOM	440	O	SER	A	58	2.107	-22.848	-17.305	1.00	12.41	O
ATOM	441	CB	SER	A	58	-0.468	-21.771	-18.367	1.00	19.91	C
ATOM	442	OG	SER	A	58	-1.586	-20.943	-18.670	1.00	22.34	O
ATOM	443	N	ALA	A	59	2.580	-20.666	-17.191	1.00	16.30	N
ATOM	444	CA	ALA	A	59	4.000	-20.840	-17.363	1.00	19.02	C
ATOM	445	C	ALA	A	59	4.585	-21.590	-16.177	1.00	21.95	C
ATOM	446	O	ALA	A	59	4.252	-21.262	-15.033	1.00	23.97	O
ATOM	447	CB	ALA	A	59	4.640	-19.489	-17.474	1.00	22.09	C
ATOM	448	N	GLU	A	60	5.602	-22.419	-16.441	1.00	22.59	N
ATOM	449	CA	GLU	A	60	6.267	-23.242	-15.417	1.00	22.93	C
ATOM	450	C	GLU	A	60	6.511	-22.498	-14.113	1.00	24.76	C
ATOM	451	O	GLU	A	60	6.901	-21.338	-14.122	1.00	28.75	O
ATOM	452	CB	GLU	A	60	7.611	-23.778	-15.934	1.00	19.81	C
ATOM	453	CG	GLU	A	60	8.417	-24.596	-14.918	1.00	16.82	C
ATOM	454	CD	GLU	A	60	9.732	-25.160	-15.474	1.00	17.21	C
ATOM	455	OE1	GLU	A	60	10.733	-24.414	-15.489	1.00	14.77	O
ATOM	456	OE2	GLU	A	60	9.794	-26.376	-15.792	1.00	16.15	O1-
ATOM	457	N	ASN	A	61	6.248	-23.175	-13.002	1.00	25.15	N
ATOM	458	CA	ASN	A	61	6.546	-22.712	-11.638	1.00	26.26	C
ATOM	459	C	ASN	A	61	5.873	-21.448	-11.121	1.00	26.29	C
ATOM	460	O	ASN	A	61	6.007	-21.124	-9.945	1.00	26.16	O
ATOM	461	CB	ASN	A	61	8.054	-22.619	-11.376	1.00	25.05	C
ATOM	462	CG	ASN	A	61	8.730	-21.612	-12.252	1.00	25.32	C
ATOM	463	ND2	ASN	A	61	8.313	-20.363	-12.155	1.00	21.35	N
ATOM	464	OD1	ASN	A	61	9.503	-21.985	-13.129	1.00	26.74	O
ATOM	465	N	CYS	A	62	5.005	-20.840	-11.915	1.00	27.22	N
ATOM	466	CA	CYS	A	62	4.054	-19.901	-11.338	1.00	27.20	C
ATOM	467	C	CYS	A	62	3.419	-20.547	-10.106	1.00	27.53	C
ATOM	468	O	CYS	A	62	3.560	-20.010	-9.012	1.00	27.96	O
ATOM	469	CB	CYS	A	62	3.001	-19.538	-12.379	1.00	27.41	C
ATOM	470	SG	CYS	A	62	3.731	-18.673	-13.817	1.00	27.27	S
ATOM	471	N	ASP	A	63	3.166	-21.853	-10.247	1.00	29.32	N
ATOM	472	CA	ASP	A	63	2.519	-22.729	-9.259	1.00	29.88	C
ATOM	473	C	ASP	A	63	3.127	-22.814	-7.853	1.00	31.82	C
ATOM	474	O	ASP	A	63	2.702	-23.660	-7.046	1.00	30.96	O
ATOM	475	CB	ASP	A	63	2.437	-24.142	-9.824	1.00	29.57	C
ATOM	476	CG	ASP	A	63	1.214	-24.355	-10.687	1.00	31.17	C
ATOM	477	OD1	ASP	A	63	1.082	-23.702	-11.758	1.00	32.77	O
ATOM	478	OD2	ASP	A	63	0.381	-25.200	-10.295	1.00	32.47	O1-
ATOM	479	N	LYS	A	64	4.183	-22.033	-7.600	1.00	33.23	N
ATOM	480	CA	LYS	A	64	4.695	-21.785	-6.244	1.00	30.18	C
ATOM	481	C	LYS	A	64	3.561	-21.200	-5.372	1.00	29.80	C
ATOM	482	O	LYS	A	64	2.803	-20.316	-5.817	1.00	28.83	O
ATOM	483	CB	LYS	A	64	5.864	-20.782	-6.308	1.00	27.37	C
ATOM	484	CG	LYS	A	64	7.257	-21.397	-6.361	1.00	25.95	C
ATOM	485	CD	LYS	A	64	7.352	-22.527	-7.386	1.00	27.90	C
ATOM	486	CE	LYS	A	64	8.191	-23.714	-6.889	1.00	28.98	C
ATOM	487	NZ	LYS	A	64	9.640	-23.392	-6.604	1.00	27.67	N1+
ATOM	488	N	SER	A	65	3.474	-21.647	-4.120	1.00	28.75	N
ATOM	489	CA	SER	A	65	2.650	-20.934	-3.136	1.00	27.25	C
ATOM	490	C	SER	A	65	3.419	-19.725	-2.546	1.00	25.40	C
ATOM	491	O	SER	A	65	4.196	-19.869	-1.583	1.00	21.94	O
ATOM	492	CB	SER	A	65	2.188	-21.897	-2.019	1.00	28.94	C
ATOM	493	OG	SER	A	65	0.824	-22.307	-2.198	1.00	26.21	O
ATOM	494	N	LEU	A	66	3.329	-18.597	-3.256	1.00	21.69	N

ATOM	495	CA	LEU	A	66	3.971	-17.330	-2.891	1.00	18.29	C
ATOM	496	C	LEU	A	66	5.229	-17.507	-2.069	1.00	20.23	C
ATOM	497	O	LEU	A	66	6.283	-17.683	-2.652	1.00	23.75	O
ATOM	498	CB	LEU	A	66	2.982	-16.401	-2.180	1.00	12.64	C
ATOM	499	CG	LEU	A	66	3.160	-14.880	-2.253	1.00	5.07	C
ATOM	500	CD1	LEU	A	66	4.592	-14.537	-2.380	1.00	2.40	C
ATOM	501	CD2	LEU	A	66	2.384	-14.296	-3.399	1.00	2.17	C
ATOM	502	N	HIS	A	67	5.083	-17.646	-0.749	1.00	23.72	N
ATOM	503	CA	HIS	A	67	6.208	-17.826	0.192	1.00	25.77	C
ATOM	504	C	HIS	A	67	7.266	-18.712	-0.428	1.00	27.03	C
ATOM	505	O	HIS	A	67	8.407	-18.292	-0.612	1.00	28.17	O
ATOM	506	CB	HIS	A	67	5.757	-18.505	1.505	1.00	27.30	C
ATOM	507	CG	HIS	A	67	5.053	-17.596	2.474	1.00	28.03	C
ATOM	508	CD2	HIS	A	67	5.372	-16.363	2.940	1.00	25.15	C
ATOM	509	ND1	HIS	A	67	3.955	-18.009	3.206	1.00	25.30	N
ATOM	510	CE1	HIS	A	67	3.645	-17.076	4.091	1.00	24.34	C
ATOM	511	NE2	HIS	A	67	4.488	-16.070	3.947	1.00	23.45	N
ATOM	512	N	THR	A	68	6.833	-19.877	-0.895	1.00	28.20	N
ATOM	513	CA	THR	A	68	7.749	-20.853	-1.467	1.00	31.25	C
ATOM	514	C	THR	A	68	8.754	-20.271	-2.461	1.00	32.00	C
ATOM	515	O	THR	A	68	9.905	-20.750	-2.549	1.00	31.36	O
ATOM	516	CB	THR	A	68	6.986	-21.972	-2.142	1.00	32.39	C
ATOM	517	CG2	THR	A	68	7.624	-23.327	-1.793	1.00	31.68	C
ATOM	518	OG1	THR	A	68	5.617	-21.933	-1.697	1.00	35.75	O
ATOM	519	N	LEU	A	69	8.353	-19.227	-3.185	1.00	31.87	N
ATOM	520	CA	LEU	A	69	9.340	-18.500	-3.974	1.00	33.65	C
ATOM	521	C	LEU	A	69	10.314	-17.880	-2.982	1.00	32.74	C
ATOM	522	O	LEU	A	69	11.288	-18.548	-2.631	1.00	32.06	O
ATOM	523	CB	LEU	A	69	8.705	-17.444	-4.905	1.00	34.67	C
ATOM	524	CG	LEU	A	69	9.426	-17.171	-6.259	1.00	34.79	C
ATOM	525	CD1	LEU	A	69	10.395	-15.967	-6.148	1.00	32.65	C
ATOM	526	CD2	LEU	A	69	10.174	-18.427	-6.738	1.00	31.64	C
ATOM	527	N	PHE	A	70	9.943	-16.747	-2.374	1.00	30.96	N
ATOM	528	CA	PHE	A	70	10.788	-16.080	-1.365	1.00	30.54	C
ATOM	529	C	PHE	A	70	11.691	-17.099	-0.646	1.00	29.74	C
ATOM	530	O	PHE	A	70	12.906	-17.097	-0.807	1.00	26.41	O
ATOM	531	CB	PHE	A	70	9.932	-15.387	-0.288	1.00	30.25	C
ATOM	532	CG	PHE	A	70	9.227	-14.125	-0.737	1.00	28.46	C
ATOM	533	CD1	PHE	A	70	8.468	-14.109	-1.899	1.00	26.39	C
ATOM	534	CD2	PHE	A	70	9.075	-13.072	0.168	1.00	24.40	C
ATOM	535	CE1	PHE	A	70	7.554	-13.084	-2.130	1.00	27.08	C
ATOM	536	CE2	PHE	A	70	8.165	-12.058	-0.054	1.00	21.72	C
ATOM	537	CZ	PHE	A	70	7.399	-12.062	-1.196	1.00	25.72	C
ATOM	538	N	GLY	A	71	11.043	-18.122	-0.104	1.00	31.24	N
ATOM	539	CA	GLY	A	71	11.712	-19.075	0.764	1.00	31.89	C
ATOM	540	C	GLY	A	71	12.873	-19.697	0.044	1.00	31.60	C
ATOM	541	O	GLY	A	71	14.004	-19.640	0.536	1.00	31.27	O
ATOM	542	N	ASP	A	72	12.614	-19.987	-1.227	1.00	33.37	N
ATOM	543	CA	ASP	A	72	13.555	-20.627	-2.154	1.00	33.34	C
ATOM	544	C	ASP	A	72	14.353	-19.663	-3.083	1.00	32.34	C
ATOM	545	O	ASP	A	72	15.121	-20.113	-3.946	1.00	30.19	O
ATOM	546	CB	ASP	A	72	12.767	-21.662	-2.979	1.00	33.35	C
ATOM	547	CG	ASP	A	72	12.165	-22.762	-2.099	1.00	31.88	C
ATOM	548	OD1	ASP	A	72	12.805	-23.100	-1.077	1.00	30.99	O
ATOM	549	OD2	ASP	A	72	11.059	-23.269	-2.406	1.00	29.43	O1-
ATOM	550	N	LYS	A	73	14.183	-18.352	-2.870	1.00	31.11	N
ATOM	551	CA	LYS	A	73	14.958	-17.288	-3.538	1.00	27.64	C
ATOM	552	C	LYS	A	73	15.199	-16.145	-2.533	1.00	26.15	C
ATOM	553	O	LYS	A	73	14.585	-15.081	-2.619	1.00	23.20	O
ATOM	554	CB	LYS	A	73	14.187	-16.738	-4.757	1.00	28.01	C
ATOM	555	CG	LYS	A	73	14.083	-17.691	-5.962	1.00	25.72	C
ATOM	556	CD	LYS	A	73	14.918	-17.203	-7.143	1.00	24.18	C
ATOM	557	CE	LYS	A	73	14.754	-15.712	-7.383	1.00	23.68	C
ATOM	558	NZ	LYS	A	73	16.079	-15.048	-7.529	1.00	22.67	N1+
ATOM	559	N	LEU	A	74	16.031	-16.423	-1.533	1.00	27.33	N
ATOM	560	CA	LEU	A	74	16.166	-15.602	-0.312	1.00	26.12	C
ATOM	561	C	LEU	A	74	17.355	-16.178	0.438	1.00	23.46	C
ATOM	562	O	LEU	A	74	18.398	-15.545	0.518	1.00	21.59	O
ATOM	563	CB	LEU	A	74	14.922	-15.728	0.593	1.00	26.77	C
ATOM	564	CG	LEU	A	74	14.153	-14.538	1.199	1.00	25.70	C
ATOM	565	CD1	LEU	A	74	12.799	-15.077	1.659	1.00	26.20	C

ATOM	566	CD2	LEU	A	74	14.879	-13.871	2.381	1.00	22.43	C
ATOM	567	N	CYS	A	75	17.225	-17.448	0.826	1.00	24.52	N
ATOM	568	CA	CYS	A	75	18.313	-18.240	1.395	1.00	26.88	C
ATOM	569	C	CYS	A	75	19.554	-18.212	0.475	1.00	28.33	C
ATOM	570	O	CYS	A	75	20.714	-18.148	0.939	1.00	26.66	O
ATOM	571	CB	CYS	A	75	17.830	-19.698	1.633	1.00	26.77	C
ATOM	572	SG	CYS	A	75	17.685	-20.118	3.425	1.00	27.16	S
ATOM	573	N	THR	A	76	19.283	-18.088	-0.822	1.00	30.35	N
ATOM	574	CA	THR	A	76	20.287	-18.225	-1.866	1.00	30.59	C
ATOM	575	C	THR	A	76	21.471	-17.261	-1.658	1.00	30.26	C
ATOM	576	O	THR	A	76	22.293	-17.437	-0.739	1.00	29.82	O
ATOM	577	CB	THR	A	76	19.623	-18.024	-3.284	1.00	32.29	C
ATOM	578	CG2	THR	A	76	20.023	-19.164	-4.228	1.00	32.43	C
ATOM	579	OG1	THR	A	76	18.179	-17.994	-3.171	1.00	31.05	O
ATOM	580	N	VAL	A	77	21.493	-16.179	-2.427	1.00	31.21	N
ATOM	581	CA	VAL	A	77	22.661	-15.299	-2.455	1.00	30.79	C
ATOM	582	C	VAL	A	77	22.468	-14.103	-1.514	1.00	32.91	C
ATOM	583	O	VAL	A	77	23.392	-13.312	-1.272	1.00	33.22	O
ATOM	584	CB	VAL	A	77	22.944	-14.813	-3.893	1.00	28.48	C
ATOM	585	CG1	VAL	A	77	22.227	-13.486	-4.176	1.00	25.60	C
ATOM	586	CG2	VAL	A	77	24.439	-14.718	-4.118	1.00	24.59	C
ATOM	587	N	ALA	A	78	21.257	-13.954	-0.987	1.00	33.04	N
ATOM	588	CA	ALA	A	78	21.110	-13.066	0.134	1.00	33.55	C
ATOM	589	C	ALA	A	78	22.005	-13.706	1.199	1.00	35.33	C
ATOM	590	O	ALA	A	78	23.151	-13.260	1.362	1.00	36.95	O
ATOM	591	CB	ALA	A	78	19.660	-13.008	0.576	1.00	32.27	C
ATOM	592	N	THR	A	79	21.683	-14.963	1.521	1.00	34.35	N
ATOM	593	CA	THR	A	79	22.100	-15.570	2.779	1.00	33.26	C
ATOM	594	C	THR	A	79	23.555	-16.077	2.835	1.00	32.95	C
ATOM	595	O	THR	A	79	24.250	-15.840	3.828	1.00	29.56	O
ATOM	596	CB	THR	A	79	21.140	-16.723	3.185	1.00	34.83	C
ATOM	597	CG2	THR	A	79	21.198	-16.977	4.704	1.00	35.95	C
ATOM	598	OG1	THR	A	79	19.791	-16.383	2.832	1.00	32.22	O
ATOM	599	N	LEU	A	80	24.027	-16.777	1.798	1.00	32.03	N
ATOM	600	CA	LEU	A	80	25.417	-17.297	1.808	1.00	28.26	C
ATOM	601	C	LEU	A	80	26.496	-16.225	1.630	1.00	27.39	C
ATOM	602	O	LEU	A	80	27.663	-16.471	1.914	1.00	27.30	O
ATOM	603	CB	LEU	A	80	25.609	-18.388	0.750	1.00	27.14	C
ATOM	604	CG	LEU	A	80	26.202	-18.027	-0.613	1.00	23.17	C
ATOM	605	CD1	LEU	A	80	27.191	-19.114	-1.025	1.00	23.29	C
ATOM	606	CD2	LEU	A	80	25.084	-17.888	-1.649	1.00	22.37	C
ATOM	607	N	ARG	A	81	26.117	-15.063	1.102	1.00	28.16	N
ATOM	608	CA	ARG	A	81	26.911	-13.843	1.282	1.00	28.08	C
ATOM	609	C	ARG	A	81	26.719	-13.293	2.706	1.00	29.33	C
ATOM	610	O	ARG	A	81	27.463	-12.415	3.169	1.00	28.86	O
ATOM	611	CB	ARG	A	81	26.477	-12.780	0.281	1.00	25.69	C
ATOM	612	CG	ARG	A	81	27.446	-11.627	0.186	1.00	24.75	C
ATOM	613	CD	ARG	A	81	27.337	-10.950	-1.152	1.00	25.26	C
ATOM	614	NE	ARG	A	81	27.236	-11.935	-2.211	1.00	28.70	N
ATOM	615	CZ	ARG	A	81	28.043	-12.988	-2.337	1.00	32.72	C
ATOM	616	NH1	ARG	A	81	29.145	-13.080	-1.599	1.00	31.48	N1+
ATOM	617	NH2	ARG	A	81	27.766	-13.933	-3.239	1.00	35.72	N
ATOM	618	N	GLU	A	82	25.660	-13.760	3.361	1.00	29.80	N
ATOM	619	CA	GLU	A	82	25.385	-13.405	4.745	1.00	30.13	C
ATOM	620	C	GLU	A	82	25.702	-14.591	5.709	1.00	28.95	C
ATOM	621	O	GLU	A	82	24.836	-15.378	6.068	1.00	25.40	O
ATOM	622	CB	GLU	A	82	23.930	-12.881	4.802	1.00	29.79	C
ATOM	623	CG	GLU	A	82	22.913	-13.604	5.673	1.00	28.95	C
ATOM	624	CD	GLU	A	82	22.631	-12.867	6.965	1.00	28.32	C
ATOM	625	OE1	GLU	A	82	23.152	-11.733	7.119	1.00	27.70	O
ATOM	626	OE2	GLU	A	82	21.883	-13.416	7.814	1.00	23.91	O1-
ATOM	627	N	THR	A	83	26.989	-14.795	5.996	1.00	29.92	N
ATOM	628	CA	THR	A	83	27.418	-16.000	6.718	1.00	32.38	C
ATOM	629	C	THR	A	83	28.141	-15.685	8.052	1.00	35.54	C
ATOM	630	O	THR	A	83	29.381	-15.602	8.095	1.00	37.17	O
ATOM	631	CB	THR	A	83	28.363	-16.937	5.826	1.00	29.73	C
ATOM	632	CG2	THR	A	83	27.562	-17.986	5.086	1.00	28.72	C
ATOM	633	OG1	THR	A	83	29.107	-16.168	4.865	1.00	28.72	O
ATOM	634	N	TYR	A	84	27.418	-15.611	9.171	1.00	36.72	N
ATOM	635	CA	TYR	A	84	28.134	-15.232	10.392	1.00	36.41	C
ATOM	636	C	TYR	A	84	27.787	-15.855	11.752	1.00	37.17	C

ATOM	637	O	TYR	A	84	28.696	-16.145	12.553	1.00	37.81	O
ATOM	638	CB	TYR	A	84	28.155	-13.719	10.504	1.00	32.67	C
ATOM	639	CG	TYR	A	84	29.547	-13.173	10.612	1.00	27.81	C
ATOM	640	CD1	TYR	A	84	30.321	-13.442	11.728	1.00	26.38	C
ATOM	641	CD2	TYR	A	84	30.000	-12.224	9.714	1.00	27.01	C
ATOM	642	CE1	TYR	A	84	31.467	-12.758	11.964	1.00	24.78	C
ATOM	643	CE2	TYR	A	84	31.147	-11.539	9.938	1.00	24.86	C
ATOM	644	CZ	TYR	A	84	31.865	-11.794	11.072	1.00	25.15	C
ATOM	645	OH	TYR	A	84	32.909	-10.976	11.395	1.00	27.73	O
ATOM	646	N	GLY	A	85	26.498	-15.954	12.073	1.00	37.02	N
ATOM	647	CA	GLY	A	85	26.123	-16.752	13.222	1.00	36.20	C
ATOM	648	C	GLY	A	85	25.033	-16.151	14.070	1.00	35.50	C
ATOM	649	O	GLY	A	85	25.291	-15.646	15.165	1.00	36.73	O
ATOM	650	N	GLU	A	86	23.816	-16.174	13.539	1.00	34.43	N
ATOM	651	CA	GLU	A	86	22.602	-16.106	14.366	1.00	31.00	C
ATOM	652	C	GLU	A	86	21.465	-16.802	13.613	1.00	28.33	C
ATOM	653	O	GLU	A	86	20.837	-17.735	14.124	1.00	28.62	O
ATOM	654	CB	GLU	A	86	22.220	-14.655	14.676	1.00	29.50	C
ATOM	655	CG	GLU	A	86	21.084	-14.522	15.646	1.00	25.84	C
ATOM	656	CD	GLU	A	86	21.097	-15.620	16.687	1.00	26.43	C
ATOM	657	OE1	GLU	A	86	21.992	-15.623	17.568	1.00	22.42	O
ATOM	658	OE2	GLU	A	86	20.223	-16.512	16.584	1.00	27.71	O1-
ATOM	659	N	MET	A	87	21.326	-16.474	12.340	1.00	24.32	N
ATOM	660	CA	MET	A	87	20.476	-17.275	11.494	1.00	24.03	C
ATOM	661	C	MET	A	87	21.175	-18.576	11.102	1.00	23.82	C
ATOM	662	O	MET	A	87	21.884	-18.629	10.092	1.00	22.28	O
ATOM	663	CB	MET	A	87	20.062	-16.483	10.266	1.00	22.69	C
ATOM	664	CG	MET	A	87	19.281	-15.254	10.625	1.00	21.49	C
ATOM	665	SD	MET	A	87	17.968	-15.060	9.479	1.00	25.30	S
ATOM	666	CE	MET	A	87	17.164	-13.558	10.089	1.00	25.45	C
ATOM	667	N	ALA	A	88	21.100	-19.558	12.007	1.00	24.16	N
ATOM	668	CA	ALA	A	88	21.551	-20.939	11.769	1.00	23.40	C
ATOM	669	C	ALA	A	88	20.674	-21.671	10.750	1.00	22.19	C
ATOM	670	O	ALA	A	88	20.034	-22.659	11.074	1.00	19.67	O
ATOM	671	CB	ALA	A	88	21.562	-21.707	13.092	1.00	23.53	C
ATOM	672	N	ASP	A	89	20.914	-21.344	9.489	1.00	24.31	N
ATOM	673	CA	ASP	A	89	19.989	-21.540	8.373	1.00	26.76	C
ATOM	674	C	ASP	A	89	18.712	-22.355	8.559	1.00	27.24	C
ATOM	675	O	ASP	A	89	18.747	-23.479	9.048	1.00	28.36	O
ATOM	676	CB	ASP	A	89	20.745	-22.081	7.155	1.00	29.44	C
ATOM	677	CG	ASP	A	89	20.619	-21.162	5.954	1.00	33.40	C
ATOM	678	OD1	ASP	A	89	21.358	-20.136	5.934	1.00	34.86	O
ATOM	679	OD2	ASP	A	89	19.716	-21.401	5.103	1.00	29.72	O1-
ATOM	680	N	CYS	A	90	17.732	-21.971	7.752	1.00	27.38	N
ATOM	681	CA	CYS	A	90	16.343	-22.307	8.008	1.00	26.95	C
ATOM	682	C	CYS	A	90	15.605	-22.522	6.664	1.00	26.81	C
ATOM	683	O	CYS	A	90	14.461	-22.077	6.485	1.00	28.42	O
ATOM	684	CB	CYS	A	90	15.719	-21.154	8.799	1.00	27.53	C
ATOM	685	SG	CYS	A	90	14.094	-21.429	9.556	1.00	25.39	S
ATOM	686	N	CYS	A	91	16.248	-23.192	5.708	1.00	24.62	N
ATOM	687	CA	CYS	A	91	15.559	-23.491	4.457	1.00	22.81	C
ATOM	688	C	CYS	A	91	15.315	-24.990	4.337	1.00	21.96	C
ATOM	689	O	CYS	A	91	14.563	-25.413	3.449	1.00	19.33	O
ATOM	690	CB	CYS	A	91	16.330	-22.934	3.255	1.00	24.46	C
ATOM	691	SG	CYS	A	91	17.922	-22.131	3.674	1.00	26.72	S
ATOM	692	N	ALA	A	92	15.547	-25.641	5.480	1.00	20.50	N
ATOM	693	CA	ALA	A	92	15.453	-27.100	5.702	1.00	21.22	C
ATOM	694	C	ALA	A	92	14.711	-27.984	4.682	1.00	24.74	C
ATOM	695	O	ALA	A	92	15.053	-27.983	3.494	1.00	24.03	O
ATOM	696	CB	ALA	A	92	14.900	-27.358	7.109	1.00	19.84	C
ATOM	697	N	LYS	A	93	13.819	-28.862	5.165	1.00	29.36	N
ATOM	698	CA	LYS	A	93	13.030	-29.749	4.272	1.00	32.05	C
ATOM	699	C	LYS	A	93	11.829	-28.986	3.713	1.00	32.90	C
ATOM	700	O	LYS	A	93	10.689	-29.355	4.021	1.00	32.86	O
ATOM	701	CB	LYS	A	93	12.505	-30.991	5.016	1.00	31.93	C
ATOM	702	CG	LYS	A	93	13.547	-31.775	5.787	1.00	33.86	C
ATOM	703	CD	LYS	A	93	13.897	-33.068	5.060	1.00	41.47	C
ATOM	704	CE	LYS	A	93	13.058	-34.327	5.515	1.00	43.89	C
ATOM	705	NZ	LYS	A	93	13.324	-35.551	4.649	1.00	41.62	N1+
ATOM	706	N	GLN	A	94	12.106	-27.847	3.058	1.00	34.28	N
ATOM	707	CA	GLN	A	94	11.143	-27.119	2.211	1.00	33.24	C

ATOM	708	C	GLN	A	94	9.733	-27.305	2.726	1.00	34.19	C
ATOM	709	O	GLN	A	94	9.042	-28.292	2.385	1.00	33.84	O
ATOM	710	CB	GLN	A	94	11.233	-27.588	0.762	1.00	31.80	C
ATOM	711	CG	GLN	A	94	10.790	-26.549	-0.236	1.00	34.94	C
ATOM	712	CD	GLN	A	94	11.426	-26.732	-1.637	1.00	38.30	C
ATOM	713	NE2	GLN	A	94	12.641	-26.177	-1.815	1.00	40.46	N
ATOM	714	OE1	GLN	A	94	10.825	-27.321	-2.563	1.00	32.88	O
ATOM	715	N	GLU	A	95	9.332	-26.345	3.554	1.00	32.90	N
ATOM	716	CA	GLU	A	95	8.335	-26.553	4.596	1.00	29.83	C
ATOM	717	C	GLU	A	95	7.742	-25.193	4.953	1.00	27.35	C
ATOM	718	O	GLU	A	95	8.463	-24.205	5.067	1.00	27.18	O
ATOM	719	CB	GLU	A	95	8.999	-27.179	5.835	1.00	29.20	C
ATOM	720	CG	GLU	A	95	10.428	-26.672	6.091	1.00	31.06	C
ATOM	721	CD	GLU	A	95	11.023	-27.126	7.434	1.00	31.73	C
ATOM	722	OE1	GLU	A	95	10.421	-28.009	8.097	1.00	33.07	O
ATOM	723	OE2	GLU	A	95	12.075	-26.563	7.821	1.00	28.41	O1-
ATOM	724	N	PRO	A	96	6.413	-25.117	5.082	1.00	26.21	N
ATOM	725	CA	PRO	A	96	5.812	-24.684	6.341	1.00	24.52	C
ATOM	726	C	PRO	A	96	6.808	-24.184	7.407	1.00	25.14	C
ATOM	727	O	PRO	A	96	7.050	-22.970	7.514	1.00	25.18	O
ATOM	728	CB	PRO	A	96	5.052	-25.927	6.769	1.00	25.77	C
ATOM	729	CG	PRO	A	96	4.695	-26.630	5.390	1.00	25.29	C
ATOM	730	CD	PRO	A	96	5.461	-25.931	4.308	1.00	22.87	C
ATOM	731	N	GLU	A	97	7.471	-25.114	8.099	1.00	25.87	N
ATOM	732	CA	GLU	A	97	8.490	-24.774	9.105	1.00	24.65	C
ATOM	733	C	GLU	A	97	9.746	-24.064	8.538	1.00	24.75	C
ATOM	734	O	GLU	A	97	10.841	-24.176	9.090	1.00	25.54	O
ATOM	735	CB	GLU	A	97	8.900	-26.035	9.903	1.00	22.10	C
ATOM	736	CG	GLU	A	97	9.205	-25.768	11.382	1.00	20.67	C
ATOM	737	CD	GLU	A	97	9.771	-26.971	12.146	1.00	21.89	C
ATOM	738	OE1	GLU	A	97	9.336	-28.118	11.890	1.00	20.02	O
ATOM	739	OE2	GLU	A	97	10.584	-26.752	13.080	1.00	21.31	O1-
ATOM	740	N	ARG	A	98	9.603	-23.344	7.433	1.00	25.09	N
ATOM	741	CA	ARG	A	98	10.673	-22.458	7.010	1.00	25.81	C
ATOM	742	C	ARG	A	98	10.317	-21.131	7.623	1.00	25.39	C
ATOM	743	O	ARG	A	98	10.978	-20.710	8.581	1.00	24.60	O
ATOM	744	CB	ARG	A	98	10.787	-22.358	5.466	1.00	28.52	C
ATOM	745	CG	ARG	A	98	10.015	-21.212	4.761	1.00	29.53	C
ATOM	746	CD	ARG	A	98	9.578	-21.625	3.364	1.00	32.14	C
ATOM	747	NE	ARG	A	98	8.122	-21.618	3.201	1.00	35.46	N
ATOM	748	CZ	ARG	A	98	7.473	-22.269	2.232	1.00	36.58	C
ATOM	749	NH1	ARG	A	98	8.153	-23.041	1.390	1.00	34.88	N1+
ATOM	750	NH2	ARG	A	98	6.140	-22.181	2.122	1.00	35.51	N
ATOM	751	N	ASN	A	99	9.118	-20.641	7.289	1.00	24.15	N
ATOM	752	CA	ASN	A	99	8.828	-19.225	7.492	1.00	23.31	C
ATOM	753	C	ASN	A	99	9.235	-18.901	8.910	1.00	22.87	C
ATOM	754	O	ASN	A	99	10.205	-18.165	9.103	1.00	20.69	O
ATOM	755	CB	ASN	A	99	7.347	-18.902	7.287	1.00	22.49	C
ATOM	756	CG	ASN	A	99	7.134	-17.493	6.738	1.00	24.38	C
ATOM	757	ND2	ASN	A	99	7.943	-16.540	7.206	1.00	21.20	N
ATOM	758	OD1	ASN	A	99	6.321	-17.287	5.821	1.00	28.44	O
ATOM	759	N	GLU	A	100	8.818	-19.821	9.785	1.00	21.65	N
ATOM	760	CA	GLU	A	100	8.975	-19.687	11.215	1.00	20.63	C
ATOM	761	C	GLU	A	100	10.448	-19.660	11.578	1.00	22.84	C
ATOM	762	O	GLU	A	100	11.049	-18.584	11.656	1.00	23.88	O
ATOM	763	CB	GLU	A	100	8.255	-20.822	11.950	1.00	16.75	C
ATOM	764	CG	GLU	A	100	6.754	-20.854	11.705	1.00	18.79	C
ATOM	765	CD	GLU	A	100	6.355	-21.788	10.556	1.00	24.05	C
ATOM	766	OE1	GLU	A	100	6.735	-22.979	10.603	1.00	23.63	O
ATOM	767	OE2	GLU	A	100	5.629	-21.357	9.622	1.00	26.06	O1-
ATOM	768	N	CYS	A	101	11.073	-20.826	11.570	1.00	26.26	N
ATOM	769	CA	CYS	A	101	12.183	-21.078	12.477	1.00	29.17	C
ATOM	770	C	CYS	A	101	13.170	-19.962	12.458	1.00	28.71	C
ATOM	771	O	CYS	A	101	13.708	-19.631	13.507	1.00	29.61	O
ATOM	772	CB	CYS	A	101	12.927	-22.363	12.140	1.00	31.73	C
ATOM	773	SG	CYS	A	101	14.563	-21.967	11.457	1.00	33.00	S
ATOM	774	N	PHE	A	102	13.459	-19.419	11.274	1.00	29.99	N
ATOM	775	CA	PHE	A	102	14.339	-18.251	11.208	1.00	30.99	C
ATOM	776	C	PHE	A	102	13.937	-17.084	10.309	1.00	30.01	C
ATOM	777	O	PHE	A	102	14.198	-15.929	10.646	1.00	31.09	O
ATOM	778	CB	PHE	A	102	15.794	-18.669	10.927	1.00	29.15	C

ATOM	779	CG	PHE	A	102	16.643	-18.701	12.165	1.00	31.69	C
ATOM	780	CD1	PHE	A	102	16.206	-18.063	13.325	1.00	31.15	C
ATOM	781	CD2	PHE	A	102	17.771	-19.508	12.236	1.00	33.88	C
ATOM	782	CE1	PHE	A	102	16.858	-18.244	14.537	1.00	33.52	C
ATOM	783	CE2	PHE	A	102	18.441	-19.698	13.451	1.00	34.28	C
ATOM	784	CZ	PHE	A	102	17.979	-19.066	14.605	1.00	35.49	C
ATOM	785	N	LEU	A	103	13.308	-17.360	9.174	1.00	29.36	N
ATOM	786	CA	LEU	A	103	13.003	-16.279	8.237	1.00	26.14	C
ATOM	787	C	LEU	A	103	11.972	-15.389	8.900	1.00	25.93	C
ATOM	788	O	LEU	A	103	12.147	-14.171	8.921	1.00	25.78	O
ATOM	789	CB	LEU	A	103	12.461	-16.815	6.906	1.00	19.74	C
ATOM	790	CG	LEU	A	103	13.228	-17.942	6.214	1.00	12.38	C
ATOM	791	CD1	LEU	A	103	12.638	-18.120	4.854	1.00	9.21	C
ATOM	792	CD2	LEU	A	103	14.710	-17.659	6.156	1.00	6.56	C
ATOM	793	N	GLN	A	104	11.085	-16.014	9.683	1.00	25.30	N
ATOM	794	CA	GLN	A	104	10.052	-15.283	10.414	1.00	25.11	C
ATOM	795	C	GLN	A	104	10.454	-14.979	11.849	1.00	25.04	C
ATOM	796	O	GLN	A	104	9.587	-14.855	12.719	1.00	24.08	O
ATOM	797	CB	GLN	A	104	8.742	-16.057	10.419	1.00	24.18	C
ATOM	798	CG	GLN	A	104	7.502	-15.185	10.263	1.00	26.71	C
ATOM	799	CD	GLN	A	104	6.727	-14.995	11.555	1.00	27.66	C
ATOM	800	NE2	GLN	A	104	5.873	-13.976	11.579	1.00	27.08	N
ATOM	801	OE1	GLN	A	104	6.884	-15.758	12.520	1.00	26.58	O
ATOM	802	N	HIS	A	105	11.771	-14.903	12.102	1.00	27.00	N
ATOM	803	CA	HIS	A	105	12.310	-14.502	13.416	1.00	24.47	C
ATOM	804	C	HIS	A	105	13.366	-13.402	13.432	1.00	21.96	C
ATOM	805	O	HIS	A	105	14.561	-13.626	13.636	1.00	18.43	O
ATOM	806	CB	HIS	A	105	12.745	-15.726	14.239	1.00	22.38	C
ATOM	807	CG	HIS	A	105	11.579	-16.471	14.785	1.00	21.89	C
ATOM	808	CD2	HIS	A	105	10.375	-16.007	15.196	1.00	21.60	C
ATOM	809	ND1	HIS	A	105	11.379	-17.806	14.479	1.00	20.64	N
ATOM	810	CE1	HIS	A	105	10.095	-18.100	14.625	1.00	22.23	C
ATOM	811	NE2	HIS	A	105	9.467	-17.022	15.048	1.00	23.35	N
ATOM	812	N	LYS	A	106	12.917	-12.304	12.860	1.00	19.95	N
ATOM	813	CA	LYS	A	106	12.919	-11.020	13.530	1.00	19.97	C
ATOM	814	C	LYS	A	106	13.352	-11.055	14.998	1.00	20.41	C
ATOM	815	O	LYS	A	106	12.569	-11.484	15.844	1.00	19.74	O
ATOM	816	CB	LYS	A	106	11.509	-10.434	13.441	1.00	18.97	C
ATOM	817	CG	LYS	A	106	10.855	-10.624	12.077	1.00	14.34	C
ATOM	818	CD	LYS	A	106	9.593	-9.822	11.956	1.00	12.34	C
ATOM	819	CE	LYS	A	106	8.917	-10.071	10.618	1.00	15.93	C
ATOM	820	NZ	LYS	A	106	7.629	-9.296	10.461	1.00	19.28	N1+
ATOM	821	N	ASP	A	107	14.647	-10.804	15.235	1.00	20.45	N
ATOM	822	CA	ASP	A	107	15.129	-10.023	16.386	1.00	19.31	C
ATOM	823	C	ASP	A	107	14.254	-8.775	16.470	1.00	20.32	C
ATOM	824	O	ASP	A	107	13.725	-8.318	15.464	1.00	18.89	O
ATOM	825	CB	ASP	A	107	16.582	-9.589	16.168	1.00	18.38	C
ATOM	826	CG	ASP	A	107	17.324	-9.293	17.468	1.00	20.19	C
ATOM	827	OD1	ASP	A	107	16.972	-8.328	18.186	1.00	20.89	O
ATOM	828	OD2	ASP	A	107	18.343	-9.964	17.709	1.00	20.24	O1-
ATOM	829	N	ASP	A	108	14.062	-8.248	17.673	1.00	22.88	N
ATOM	830	CA	ASP	A	108	12.971	-7.310	17.867	1.00	24.38	C
ATOM	831	C	ASP	A	108	13.419	-5.855	17.972	1.00	28.19	C
ATOM	832	O	ASP	A	108	13.842	-5.278	16.979	1.00	34.68	O
ATOM	833	CB	ASP	A	108	12.119	-7.724	19.066	1.00	21.46	C
ATOM	834	CG	ASP	A	108	10.665	-7.323	18.893	1.00	21.67	C
ATOM	835	OD1	ASP	A	108	10.407	-6.411	18.098	1.00	20.61	O
ATOM	836	OD2	ASP	A	108	9.792	-7.901	19.583	1.00	24.35	O1-
ATOM	837	N	ASN	A	109	13.182	-5.218	19.110	1.00	28.47	N
ATOM	838	CA	ASN	A	109	13.326	-3.763	19.264	1.00	28.03	C
ATOM	839	C	ASN	A	109	14.728	-3.298	18.833	1.00	28.47	C
ATOM	840	O	ASN	A	109	15.003	-3.159	17.631	1.00	29.63	O
ATOM	841	CB	ASN	A	109	13.100	-3.463	20.742	1.00	30.55	C
ATOM	842	CG	ASN	A	109	12.170	-2.307	20.987	1.00	30.28	C
ATOM	843	ND2	ASN	A	109	11.029	-2.303	20.315	1.00	34.20	N
ATOM	844	OD1	ASN	A	109	12.411	-1.514	21.893	1.00	28.96	O
ATOM	845	N	PRO	A	110	15.632	-3.006	19.797	1.00	27.35	N
ATOM	846	CA	PRO	A	110	16.964	-3.597	19.834	1.00	27.24	C
ATOM	847	C	PRO	A	110	17.241	-4.929	19.113	1.00	29.36	C
ATOM	848	O	PRO	A	110	17.484	-6.001	19.740	1.00	29.54	O
ATOM	849	CB	PRO	A	110	17.284	-3.559	21.317	1.00	25.13	C

ATOM	850	CG	PRO	A	110	16.640	-2.142	21.702	1.00	25.75	C
ATOM	851	CD	PRO	A	110	15.683	-1.751	20.558	1.00	24.19	C
ATOM	852	N	ASN	A	111	17.144	-4.835	17.781	1.00	27.97	N
ATOM	853	CA	ASN	A	111	18.078	-5.469	16.846	1.00	24.32	C
ATOM	854	C	ASN	A	111	19.394	-4.725	16.826	1.00	22.19	C
ATOM	855	O	ASN	A	111	19.509	-3.710	17.495	1.00	19.34	O
ATOM	856	CB	ASN	A	111	17.515	-5.455	15.440	1.00	21.73	C
ATOM	857	CG	ASN	A	111	16.979	-4.106	15.050	1.00	19.05	C
ATOM	858	ND2	ASN	A	111	17.263	-3.075	15.851	1.00	14.84	N
ATOM	859	OD1	ASN	A	111	16.299	-3.992	14.035	1.00	22.36	O
ATOM	860	N	LEU	A	112	20.147	-4.978	15.759	1.00	24.65	N
ATOM	861	CA	LEU	A	112	21.611	-4.907	15.800	1.00	26.73	C
ATOM	862	C	LEU	A	112	22.172	-3.568	15.277	1.00	26.67	C
ATOM	863	O	LEU	A	112	21.839	-2.531	15.854	1.00	23.61	O
ATOM	864	CB	LEU	A	112	22.185	-6.148	15.089	1.00	27.52	C
ATOM	865	CG	LEU	A	112	23.017	-7.089	15.972	1.00	31.09	C
ATOM	866	CD1	LEU	A	112	22.946	-8.557	15.481	1.00	26.90	C
ATOM	867	CD2	LEU	A	112	24.458	-6.546	16.003	1.00	29.65	C
ATOM	868	N	PRO	A	113	23.112	-3.565	14.288	1.00	29.08	N
ATOM	869	CA	PRO	A	113	23.734	-2.245	14.101	1.00	31.20	C
ATOM	870	C	PRO	A	113	22.679	-1.238	13.619	1.00	33.56	C
ATOM	871	O	PRO	A	113	21.661	-1.636	12.981	1.00	31.23	O
ATOM	872	CB	PRO	A	113	24.818	-2.486	13.030	1.00	29.19	C
ATOM	873	CG	PRO	A	113	24.576	-3.877	12.496	1.00	28.17	C
ATOM	874	CD	PRO	A	113	23.241	-4.343	13.047	1.00	29.64	C
ATOM	875	N	ARG	A	114	22.928	0.050	13.928	1.00	33.99	N
ATOM	876	CA	ARG	A	114	21.881	1.077	13.890	1.00	32.55	C
ATOM	877	C	ARG	A	114	22.292	2.540	13.957	1.00	32.21	C
ATOM	878	O	ARG	A	114	21.575	3.391	13.430	1.00	31.11	O
ATOM	879	CB	ARG	A	114	20.905	0.809	15.017	1.00	33.18	C
ATOM	880	CG	ARG	A	114	19.953	-0.281	14.661	1.00	36.64	C
ATOM	881	CD	ARG	A	114	19.020	-0.467	15.750	1.00	39.87	C
ATOM	882	NE	ARG	A	114	18.517	0.826	16.159	1.00	43.15	N
ATOM	883	CZ	ARG	A	114	17.756	0.977	17.222	1.00	47.64	C
ATOM	884	NH1	ARG	A	114	17.324	-0.119	17.852	1.00	51.30	N1+
ATOM	885	NH2	ARG	A	114	17.373	2.192	17.608	1.00	50.22	N
ATOM	886	N	LEU	A	115	23.284	2.864	14.788	1.00	33.02	N
ATOM	887	CA	LEU	A	115	23.491	4.243	15.202	1.00	33.18	C
ATOM	888	C	LEU	A	115	23.305	5.255	14.059	1.00	34.71	C
ATOM	889	O	LEU	A	115	22.386	6.065	14.145	1.00	35.24	O
ATOM	890	CB	LEU	A	115	24.860	4.423	15.860	1.00	32.34	C
ATOM	891	CG	LEU	A	115	25.037	5.442	17.017	1.00	31.68	C
ATOM	892	CD1	LEU	A	115	26.534	5.671	17.168	1.00	29.02	C
ATOM	893	CD2	LEU	A	115	24.324	6.786	16.764	1.00	26.36	C
ATOM	894	N	VAL	A	116	24.007	5.019	12.919	1.00	35.67	N
ATOM	895	CA	VAL	A	116	24.061	5.935	11.756	1.00	36.09	C
ATOM	896	C	VAL	A	116	22.692	6.478	11.298	1.00	37.34	C
ATOM	897	O	VAL	A	116	21.657	6.293	11.959	1.00	39.54	O
ATOM	898	CB	VAL	A	116	24.705	5.248	10.482	1.00	34.24	C
ATOM	899	CG1	VAL	A	116	26.241	4.937	10.734	1.00	33.93	C
ATOM	900	CG2	VAL	A	116	23.974	3.954	10.123	1.00	30.72	C
ATOM	901	N	ARG	A	117	22.732	7.203	10.185	1.00	37.72	N
ATOM	902	CA	ARG	A	117	21.486	7.644	9.511	1.00	40.29	C
ATOM	903	C	ARG	A	117	21.917	8.611	8.413	1.00	39.62	C
ATOM	904	O	ARG	A	117	23.104	8.596	8.037	1.00	41.35	O
ATOM	905	CB	ARG	A	117	20.547	8.386	10.490	1.00	42.16	C
ATOM	906	CG	ARG	A	117	19.116	7.763	10.656	1.00	46.39	C
ATOM	907	CD	ARG	A	117	18.704	7.899	12.134	1.00	51.79	C
ATOM	908	NE	ARG	A	117	19.092	9.229	12.637	1.00	56.27	N
ATOM	909	CZ	ARG	A	117	18.282	10.024	13.353	1.00	57.56	C
ATOM	910	NH1	ARG	A	117	18.086	11.271	12.915	1.00	57.16	N1+
ATOM	911	NH2	ARG	A	117	18.065	9.782	14.657	1.00	55.96	N
ATOM	912	N	PRO	A	118	20.982	9.415	7.863	1.00	37.83	N
ATOM	913	CA	PRO	A	118	21.179	10.738	7.262	1.00	38.11	C
ATOM	914	C	PRO	A	118	21.640	11.818	8.236	1.00	36.72	C
ATOM	915	O	PRO	A	118	21.590	11.611	9.463	1.00	38.18	O
ATOM	916	CB	PRO	A	118	19.774	11.075	6.712	1.00	38.53	C
ATOM	917	CG	PRO	A	118	18.892	10.088	7.386	1.00	38.63	C
ATOM	918	CD	PRO	A	118	19.697	8.870	7.443	1.00	37.42	C
ATOM	919	N	GLU	A	119	21.806	13.037	7.693	1.00	34.77	N
ATOM	920	CA	GLU	A	119	22.310	14.182	8.455	1.00	33.84	C

ATOM	921	C	GLU	A	119	22.333	15.588	7.791	1.00	31.31	C
ATOM	922	O	GLU	A	119	21.800	15.762	6.680	1.00	27.96	O
ATOM	923	CB	GLU	A	119	23.684	13.859	9.039	1.00	34.16	C
ATOM	924	CG	GLU	A	119	23.650	13.731	10.573	1.00	29.57	C
ATOM	925	CD	GLU	A	119	23.678	15.084	11.263	1.00	27.59	C
ATOM	926	OE1	GLU	A	119	24.804	15.594	11.417	1.00	25.30	O
ATOM	927	OE2	GLU	A	119	22.602	15.581	11.689	1.00	21.70	O1-
ATOM	928	N	VAL	A	120	23.119	16.516	8.368	1.00	29.09	N
ATOM	929	CA	VAL	A	120	22.754	17.938	8.468	1.00	27.70	C
ATOM	930	C	VAL	A	120	21.995	18.387	7.264	1.00	27.84	C
ATOM	931	O	VAL	A	120	20.779	18.514	7.318	1.00	29.90	O
ATOM	932	CB	VAL	A	120	23.973	18.925	8.622	1.00	27.28	C
ATOM	933	CG1	VAL	A	120	23.965	19.580	10.005	1.00	25.95	C
ATOM	934	CG2	VAL	A	120	25.309	18.221	8.353	1.00	27.55	C
ATOM	935	N	ASP	A	121	22.688	18.398	6.131	1.00	28.02	N
ATOM	936	CA	ASP	A	121	22.234	19.108	4.946	1.00	26.82	C
ATOM	937	C	ASP	A	121	21.939	18.197	3.749	1.00	25.21	C
ATOM	938	O	ASP	A	121	21.035	18.483	2.953	1.00	23.24	O
ATOM	939	CB	ASP	A	121	23.247	20.212	4.560	1.00	25.99	C
ATOM	940	CG	ASP	A	121	24.676	19.899	5.019	1.00	26.35	C
ATOM	941	OD1	ASP	A	121	25.271	18.950	4.459	1.00	27.73	O
ATOM	942	OD2	ASP	A	121	25.210	20.583	5.923	1.00	21.53	O1-
ATOM	943	N	VAL	A	122	22.591	17.041	3.682	1.00	23.49	N
ATOM	944	CA	VAL	A	122	22.769	16.383	2.386	1.00	25.51	C
ATOM	945	C	VAL	A	122	21.644	15.468	1.927	1.00	26.41	C
ATOM	946	O	VAL	A	122	21.527	15.180	0.732	1.00	25.53	O
ATOM	947	CB	VAL	A	122	24.124	15.616	2.299	1.00	25.87	C
ATOM	948	CG1	VAL	A	122	24.962	15.857	3.561	1.00	27.67	C
ATOM	949	CG2	VAL	A	122	23.896	14.114	2.031	1.00	25.34	C
ATOM	950	N	MET	A	123	20.814	15.019	2.867	1.00	29.60	N
ATOM	951	CA	MET	A	123	19.863	13.932	2.601	1.00	30.15	C
ATOM	952	C	MET	A	123	18.835	14.384	1.578	1.00	32.67	C
ATOM	953	O	MET	A	123	18.100	13.549	1.034	1.00	33.77	O
ATOM	954	CB	MET	A	123	19.148	13.469	3.889	1.00	27.54	C
ATOM	955	CG	MET	A	123	17.910	14.282	4.295	1.00	25.66	C
ATOM	956	SD	MET	A	123	18.202	15.511	5.615	1.00	22.74	S
ATOM	957	CE	MET	A	123	16.615	16.318	5.641	1.00	22.28	C
ATOM	958	N	CYS	A	124	18.756	15.707	1.361	1.00	32.18	N
ATOM	959	CA	CYS	A	124	17.895	16.302	0.328	1.00	29.82	C
ATOM	960	C	CYS	A	124	18.423	15.917	-1.060	1.00	27.70	C
ATOM	961	O	CYS	A	124	19.457	16.417	-1.503	1.00	27.67	O
ATOM	962	CB	CYS	A	124	17.879	17.819	0.455	1.00	27.21	C
ATOM	963	SG	CYS	A	124	17.768	18.608	-1.174	1.00	27.90	S
ATOM	964	N	ALA	A	126	16.357	14.257	-3.975	1.00	22.43	N
ATOM	965	CA	ALA	A	126	15.531	13.862	-5.118	1.00	26.10	C
ATOM	966	C	ALA	A	126	16.012	14.663	-6.335	1.00	27.83	C
ATOM	967	O	ALA	A	126	15.423	15.699	-6.716	1.00	28.31	O
ATOM	968	CB	ALA	A	126	14.054	14.116	-4.848	1.00	27.88	C
ATOM	969	N	PHE	A	127	17.206	14.284	-6.793	1.00	27.19	N
ATOM	970	CA	PHE	A	127	17.877	14.923	-7.916	1.00	25.57	C
ATOM	971	C	PHE	A	127	18.309	13.827	-8.896	1.00	25.18	C
ATOM	972	O	PHE	A	127	17.915	13.833	-10.062	1.00	24.40	O
ATOM	973	CB	PHE	A	127	19.107	15.705	-7.422	1.00	25.50	C
ATOM	974	CG	PHE	A	127	18.819	16.683	-6.298	1.00	24.31	C
ATOM	975	CD1	PHE	A	127	17.616	17.361	-6.224	1.00	23.10	C
ATOM	976	CD2	PHE	A	127	19.761	16.911	-5.307	1.00	24.98	C
ATOM	977	CE1	PHE	A	127	17.356	18.229	-5.169	1.00	24.24	C
ATOM	978	CE2	PHE	A	127	19.507	17.792	-4.260	1.00	23.55	C
ATOM	979	CZ	PHE	A	127	18.304	18.442	-4.188	1.00	22.96	C
ATOM	980	N	HIS	A	128	19.093	12.872	-8.395	1.00	23.97	N
ATOM	981	CA	HIS	A	128	19.603	11.748	-9.190	1.00	25.06	C
ATOM	982	C	HIS	A	128	19.666	10.507	-8.299	1.00	25.79	C
ATOM	983	O	HIS	A	128	20.736	9.885	-8.155	1.00	24.46	O
ATOM	984	CB	HIS	A	128	21.006	12.060	-9.762	1.00	26.48	C
ATOM	985	CG	HIS	A	128	21.630	10.926	-10.528	1.00	26.14	C
ATOM	986	CD2	HIS	A	128	21.599	10.603	-11.842	1.00	26.98	C
ATOM	987	ND1	HIS	A	128	22.404	9.955	-9.919	1.00	25.60	N
ATOM	988	CE1	HIS	A	128	22.814	9.086	-10.824	1.00	25.56	C
ATOM	989	NE2	HIS	A	128	22.341	9.456	-11.999	1.00	26.11	N
ATOM	990	N	ASP	A	129	18.631	10.376	-7.473	1.00	25.20	N
ATOM	991	CA	ASP	A	129	18.171	9.095	-6.944	1.00	23.48	C

ATOM	992	C	ASP	A	129	17.157	9.345	-5.843	1.00	24.69	C
ATOM	993	O	ASP	A	129	17.123	10.429	-5.245	1.00	22.84	O
ATOM	994	CB	ASP	A	129	19.312	8.207	-6.401	1.00	22.35	C
ATOM	995	CG	ASP	A	129	20.159	8.879	-5.310	1.00	19.90	C
ATOM	996	OD1	ASP	A	129	19.796	9.960	-4.801	1.00	16.62	O
ATOM	997	OD2	ASP	A	129	21.216	8.304	-4.963	1.00	18.41	O1-
ATOM	998	N	GLU	A	131	16.294	6.107	-4.845	1.00	26.76	N
ATOM	999	CA	GLU	A	131	16.936	4.947	-4.238	1.00	26.85	C
ATOM	1000	C	GLU	A	131	17.501	5.427	-2.883	1.00	26.10	C
ATOM	1001	O	GLU	A	131	17.117	4.893	-1.861	1.00	25.45	O
ATOM	1002	CB	GLU	A	131	18.035	4.384	-5.180	1.00	25.89	C
ATOM	1003	CG	GLU	A	131	17.551	3.445	-6.329	1.00	21.04	C
ATOM	1004	CD	GLU	A	131	16.340	3.971	-7.147	1.00	22.14	C
ATOM	1005	OE1	GLU	A	131	16.533	4.847	-8.019	1.00	19.96	O
ATOM	1006	OE2	GLU	A	131	15.222	3.409	-7.018	1.00	19.19	O1-
ATOM	1007	N	GLU	A	132	18.176	6.583	-2.862	1.00	27.14	N
ATOM	1008	CA	GLU	A	132	18.411	7.302	-1.593	1.00	27.48	C
ATOM	1009	C	GLU	A	132	17.082	7.842	-1.037	1.00	28.11	C
ATOM	1010	O	GLU	A	132	16.106	7.962	-1.754	1.00	24.38	O
ATOM	1011	CB	GLU	A	132	19.392	8.487	-1.758	1.00	26.09	C
ATOM	1012	CG	GLU	A	132	20.903	8.155	-1.682	1.00	25.28	C
ATOM	1013	CD	GLU	A	132	21.435	7.896	-0.264	1.00	21.57	C
ATOM	1014	OE1	GLU	A	132	21.255	6.778	0.262	1.00	19.27	O
ATOM	1015	OE2	GLU	A	132	22.139	8.767	0.272	1.00	15.77	O1-
ATOM	1016	N	THR	A	133	17.137	8.383	0.170	1.00	30.85	N
ATOM	1017	CA	THR	A	133	15.943	8.621	0.974	1.00	33.25	C
ATOM	1018	C	THR	A	133	14.702	7.774	0.628	1.00	34.75	C
ATOM	1019	O	THR	A	133	14.606	6.619	1.090	1.00	36.23	O
ATOM	1020	CB	THR	A	133	15.615	10.107	0.979	1.00	34.23	C
ATOM	1021	CG2	THR	A	133	16.767	10.868	1.680	1.00	36.08	C
ATOM	1022	OG1	THR	A	133	15.497	10.586	-0.370	1.00	35.21	O
ATOM	1023	N	PHE	A	134	13.798	8.301	-0.209	1.00	34.14	N
ATOM	1024	CA	PHE	A	134	12.474	7.689	-0.444	1.00	32.44	C
ATOM	1025	C	PHE	A	134	12.485	6.162	-0.360	1.00	32.71	C
ATOM	1026	O	PHE	A	134	11.952	5.604	0.584	1.00	35.71	O
ATOM	1027	CB	PHE	A	134	11.886	8.175	-1.787	1.00	30.94	C
ATOM	1028	CG	PHE	A	134	11.252	7.086	-2.630	1.00	29.00	C
ATOM	1029	CD1	PHE	A	134	10.070	6.474	-2.245	1.00	30.88	C
ATOM	1030	CD2	PHE	A	134	11.853	6.672	-3.805	1.00	28.45	C
ATOM	1031	CE1	PHE	A	134	9.508	5.473	-3.015	1.00	29.95	C
ATOM	1032	CE2	PHE	A	134	11.302	5.674	-4.585	1.00	28.90	C
ATOM	1033	CZ	PHE	A	134	10.132	5.074	-4.191	1.00	31.63	C
ATOM	1034	N	LEU	A	135	13.227	5.508	-1.242	1.00	32.49	N
ATOM	1035	CA	LEU	A	135	13.400	4.061	-1.193	1.00	32.55	C
ATOM	1036	C	LEU	A	135	14.020	3.666	0.150	1.00	32.40	C
ATOM	1037	O	LEU	A	135	13.384	2.984	0.946	1.00	33.86	O
ATOM	1038	CB	LEU	A	135	14.295	3.623	-2.362	1.00	34.15	C
ATOM	1039	CG	LEU	A	135	14.898	2.211	-2.532	1.00	37.12	C
ATOM	1040	CD1	LEU	A	135	14.673	1.676	-3.994	1.00	35.21	C
ATOM	1041	CD2	LEU	A	135	16.396	2.278	-2.232	1.00	33.42	C
ATOM	1042	N	LYS	A	136	15.169	4.258	0.477	1.00	32.96	N
ATOM	1043	CA	LYS	A	136	15.967	3.890	1.662	1.00	31.27	C
ATOM	1044	C	LYS	A	136	15.382	4.437	2.974	1.00	30.10	C
ATOM	1045	O	LYS	A	136	16.095	4.623	3.975	1.00	27.30	O
ATOM	1046	CB	LYS	A	136	17.429	4.370	1.501	1.00	30.80	C
ATOM	1047	CG	LYS	A	136	18.317	3.488	0.613	1.00	25.87	C
ATOM	1048	CD	LYS	A	136	19.724	4.099	0.430	1.00	25.64	C
ATOM	1049	CE	LYS	A	136	20.846	3.309	1.182	1.00	21.64	C
ATOM	1050	NZ	LYS	A	136	22.219	3.921	1.063	1.00	11.74	N1+
ATOM	1051	N	LYS	A	137	14.073	4.642	2.986	1.00	28.98	N
ATOM	1052	CA	LYS	A	137	13.340	4.610	4.251	1.00	27.29	C
ATOM	1053	C	LYS	A	137	12.719	3.231	4.562	1.00	25.01	C
ATOM	1054	O	LYS	A	137	11.769	3.148	5.343	1.00	19.88	O
ATOM	1055	CB	LYS	A	137	12.267	5.703	4.278	1.00	27.89	C
ATOM	1056	CG	LYS	A	137	11.043	5.458	3.424	1.00	25.43	C
ATOM	1057	CD	LYS	A	137	10.013	6.549	3.657	1.00	24.61	C
ATOM	1058	CE	LYS	A	137	9.532	6.581	5.121	1.00	25.80	C
ATOM	1059	NZ	LYS	A	137	10.478	7.205	6.080	1.00	22.10	N1+
ATOM	1060	N	TYR	A	138	13.261	2.170	3.944	1.00	23.60	N
ATOM	1061	CA	TYR	A	138	12.987	0.797	4.367	1.00	23.57	C
ATOM	1062	C	TYR	A	138	14.201	-0.014	4.898	1.00	25.14	C

ATOM	1063	O	TYR	A	138	14.157	-0.518	6.019	1.00	26.51	O
ATOM	1064	CB	TYR	A	138	12.287	0.013	3.262	1.00	23.90	C
ATOM	1065	CG	TYR	A	138	11.095	0.708	2.626	1.00	23.12	C
ATOM	1066	CD1	TYR	A	138	10.272	1.532	3.375	1.00	21.31	C
ATOM	1067	CD2	TYR	A	138	10.950	0.725	1.238	1.00	20.04	C
ATOM	1068	CE1	TYR	A	138	9.396	2.388	2.764	1.00	21.87	C
ATOM	1069	CE2	TYR	A	138	10.096	1.584	0.627	1.00	18.89	C
ATOM	1070	CZ	TYR	A	138	9.347	2.451	1.385	1.00	19.37	C
ATOM	1071	OH	TYR	A	138	8.863	3.599	0.796	1.00	16.36	O
ATOM	1072	N	LEU	A	139	15.348	-0.004	4.229	1.00	26.31	N
ATOM	1073	CA	LEU	A	139	16.544	-0.492	4.932	1.00	28.30	C
ATOM	1074	C	LEU	A	139	16.903	0.423	6.137	1.00	30.40	C
ATOM	1075	O	LEU	A	139	18.050	0.459	6.603	1.00	33.77	O
ATOM	1076	CB	LEU	A	139	17.764	-0.643	3.987	1.00	23.98	C
ATOM	1077	CG	LEU	A	139	18.987	-1.356	4.621	1.00	21.06	C
ATOM	1078	CD1	LEU	A	139	19.161	-2.769	4.075	1.00	15.84	C
ATOM	1079	CD2	LEU	A	139	20.249	-0.513	4.429	1.00	18.03	C
ATOM	1080	N	TYR	A	140	15.914	1.125	6.676	1.00	28.28	N
ATOM	1081	CA	TYR	A	140	16.160	2.032	7.782	1.00	27.48	C
ATOM	1082	C	TYR	A	140	14.903	2.160	8.640	1.00	26.31	C
ATOM	1083	O	TYR	A	140	14.644	1.316	9.484	1.00	25.70	O
ATOM	1084	CB	TYR	A	140	16.555	3.370	7.196	1.00	29.37	C
ATOM	1085	CG	TYR	A	140	18.029	3.568	7.070	1.00	32.07	C
ATOM	1086	CD1	TYR	A	140	18.907	2.754	7.774	1.00	32.26	C
ATOM	1087	CD2	TYR	A	140	18.511	4.785	6.615	1.00	35.07	C
ATOM	1088	CE1	TYR	A	140	20.189	3.177	8.085	1.00	31.31	C
ATOM	1089	CE2	TYR	A	140	19.788	5.220	6.938	1.00	34.45	C
ATOM	1090	CZ	TYR	A	140	20.604	4.429	7.691	1.00	30.17	C
ATOM	1091	OH	TYR	A	140	21.706	5.009	8.252	1.00	30.52	O
ATOM	1092	N	GLU	A	141	13.993	3.007	8.184	1.00	27.43	N
ATOM	1093	CA	GLU	A	141	12.635	3.080	8.702	1.00	26.66	C
ATOM	1094	C	GLU	A	141	11.830	1.793	8.474	1.00	25.94	C
ATOM	1095	O	GLU	A	141	10.589	1.841	8.394	1.00	24.42	O
ATOM	1096	CB	GLU	A	141	11.920	4.269	8.058	1.00	27.66	C
ATOM	1097	CG	GLU	A	141	12.753	5.571	8.070	1.00	28.85	C
ATOM	1098	CD	GLU	A	141	12.126	6.665	8.930	1.00	30.04	C
ATOM	1099	OE1	GLU	A	141	12.059	6.463	10.169	1.00	28.05	O
ATOM	1100	OE2	GLU	A	141	11.684	7.706	8.368	1.00	27.92	O1-
ATOM	1101	N	ILE	A	142	12.543	0.668	8.301	1.00	25.02	N
ATOM	1102	CA	ILE	A	142	11.959	-0.670	8.411	1.00	23.92	C
ATOM	1103	C	ILE	A	142	12.891	-1.879	8.483	1.00	22.66	C
ATOM	1104	O	ILE	A	142	12.422	-3.019	8.460	1.00	21.14	O
ATOM	1105	CB	ILE	A	142	10.920	-0.960	7.307	1.00	25.56	C
ATOM	1106	CG1	ILE	A	142	9.839	-1.855	7.893	1.00	31.26	C
ATOM	1107	CG2	ILE	A	142	11.533	-1.747	6.136	1.00	26.16	C
ATOM	1108	CD1	ILE	A	142	9.808	-1.835	9.391	1.00	32.34	C
ATOM	1109	N	ALA	A	143	14.192	-1.655	8.574	1.00	21.53	N
ATOM	1110	CA	ALA	A	143	15.080	-2.739	8.995	1.00	21.28	C
ATOM	1111	C	ALA	A	143	15.259	-2.555	10.491	1.00	21.40	C
ATOM	1112	O	ALA	A	143	15.077	-3.478	11.295	1.00	20.55	O
ATOM	1113	CB	ALA	A	143	16.437	-2.637	8.279	1.00	20.32	C
ATOM	1114	N	ARG	A	144	15.496	-1.300	10.850	1.00	21.00	N
ATOM	1115	CA	ARG	A	144	15.726	-0.906	12.216	1.00	21.33	C
ATOM	1116	C	ARG	A	144	14.498	-1.163	13.053	1.00	21.04	C
ATOM	1117	O	ARG	A	144	13.397	-0.738	12.694	1.00	20.32	O
ATOM	1118	CB	ARG	A	144	16.052	0.577	12.271	1.00	21.01	C
ATOM	1119	CG	ARG	A	144	17.510	0.863	12.247	1.00	17.71	C
ATOM	1120	CD	ARG	A	144	18.023	1.041	10.857	1.00	17.22	C
ATOM	1121	NE	ARG	A	144	18.645	2.342	10.630	1.00	18.81	N
ATOM	1122	CZ	ARG	A	144	19.496	2.950	11.447	1.00	17.78	C
ATOM	1123	NH1	ARG	A	144	19.398	2.791	12.749	1.00	22.32	N1+
ATOM	1124	NH2	ARG	A	144	20.194	3.978	11.001	1.00	19.08	N
ATOM	1125	N	ARG	A	145	14.686	-1.933	14.117	1.00	22.67	N
ATOM	1126	CA	ARG	A	145	13.838	-1.888	15.297	1.00	22.80	C
ATOM	1127	C	ARG	A	145	12.341	-1.995	14.978	1.00	23.74	C
ATOM	1128	O	ARG	A	145	11.492	-1.697	15.827	1.00	24.29	O
ATOM	1129	CB	ARG	A	145	14.150	-0.595	16.060	1.00	23.74	C
ATOM	1130	CG	ARG	A	145	13.284	0.605	15.663	1.00	24.56	C
ATOM	1131	CD	ARG	A	145	14.041	1.882	15.206	1.00	23.54	C
ATOM	1132	NE	ARG	A	145	13.036	2.868	14.811	1.00	23.80	N
ATOM	1133	CZ	ARG	A	145	13.214	3.859	13.954	1.00	24.48	C

ATOM	1134	NH1	ARG	A	145	14.272	4.656	14.069	1.00	24.11	N1+
ATOM	1135	NH2	ARG	A	145	12.154	4.288	13.278	1.00	24.06	N
ATOM	1136	N	HIS	A	146	12.021	-2.380	13.739	1.00	23.24	N
ATOM	1137	CA	HIS	A	146	10.633	-2.505	13.276	1.00	21.90	C
ATOM	1138	C	HIS	A	146	10.413	-3.719	12.380	1.00	19.01	C
ATOM	1139	O	HIS	A	146	9.649	-3.649	11.433	1.00	15.22	O
ATOM	1140	CB	HIS	A	146	10.196	-1.244	12.519	1.00	21.14	C
ATOM	1141	CG	HIS	A	146	10.226	-0.013	13.357	1.00	23.07	C
ATOM	1142	CD2	HIS	A	146	10.883	1.158	13.170	1.00	24.02	C
ATOM	1143	ND1	HIS	A	146	9.778	0.000	14.658	1.00	21.23	N
ATOM	1144	CE1	HIS	A	146	10.178	1.100	15.251	1.00	24.29	C
ATOM	1145	NE2	HIS	A	146	10.844	1.831	14.373	1.00	24.47	N
ATOM	1146	N	PRO	A	147	10.896	-4.885	12.783	1.00	18.32	N
ATOM	1147	CA	PRO	A	147	10.624	-5.945	11.843	1.00	19.37	C
ATOM	1148	C	PRO	A	147	9.128	-6.280	11.753	1.00	24.48	C
ATOM	1149	O	PRO	A	147	8.718	-6.993	10.833	1.00	27.95	O
ATOM	1150	CB	PRO	A	147	11.461	-7.097	12.365	1.00	17.35	C
ATOM	1151	CG	PRO	A	147	12.544	-6.430	13.108	1.00	17.68	C
ATOM	1152	CD	PRO	A	147	11.866	-5.332	13.806	1.00	18.03	C
ATOM	1153	N	TYR	A	148	8.294	-5.713	12.629	1.00	24.82	N
ATOM	1154	CA	TYR	A	148	6.868	-6.045	12.564	1.00	25.01	C
ATOM	1155	C	TYR	A	148	6.009	-4.990	11.846	1.00	26.88	C
ATOM	1156	O	TYR	A	148	5.048	-5.353	11.167	1.00	29.08	O
ATOM	1157	CB	TYR	A	148	6.326	-6.357	13.960	1.00	21.84	C
ATOM	1158	CG	TYR	A	148	6.986	-7.573	14.586	1.00	20.84	C
ATOM	1159	CD1	TYR	A	148	8.272	-7.502	15.093	1.00	21.27	C
ATOM	1160	CD2	TYR	A	148	6.368	-8.812	14.576	1.00	21.92	C
ATOM	1161	CE1	TYR	A	148	8.926	-8.629	15.558	1.00	18.20	C
ATOM	1162	CE2	TYR	A	148	7.019	-9.947	15.036	1.00	19.43	C
ATOM	1163	CZ	TYR	A	148	8.298	-9.843	15.521	1.00	17.54	C
ATOM	1164	OH	TYR	A	148	8.966	-10.954	15.973	1.00	19.26	O
ATOM	1165	N	PHE	A	149	6.519	-3.755	11.776	1.00	26.54	N
ATOM	1166	CA	PHE	A	149	5.862	-2.630	11.080	1.00	23.95	C
ATOM	1167	C	PHE	A	149	4.992	-3.027	9.893	1.00	23.50	C
ATOM	1168	O	PHE	A	149	5.444	-3.643	8.915	1.00	20.73	O
ATOM	1169	CB	PHE	A	149	6.892	-1.578	10.614	1.00	19.95	C
ATOM	1170	CG	PHE	A	149	6.368	-0.157	10.584	1.00	18.95	C
ATOM	1171	CD1	PHE	A	149	5.244	0.189	9.840	1.00	21.19	C
ATOM	1172	CD2	PHE	A	149	7.044	0.853	11.240	1.00	17.97	C
ATOM	1173	CE1	PHE	A	149	4.814	1.514	9.748	1.00	17.03	C
ATOM	1174	CE2	PHE	A	149	6.613	2.177	11.152	1.00	17.64	C
ATOM	1175	CZ	PHE	A	149	5.501	2.501	10.402	1.00	13.77	C
ATOM	1176	N	ALA	A	151	3.646	-2.885	6.915	1.00	16.85	N
ATOM	1177	CA	ALA	A	151	3.539	-2.791	5.463	1.00	14.78	C
ATOM	1178	C	ALA	A	151	2.681	-1.614	4.972	1.00	15.60	C
ATOM	1179	O	ALA	A	151	3.223	-0.518	4.831	1.00	17.98	O
ATOM	1180	CB	ALA	A	151	3.038	-4.104	4.884	1.00	13.97	C
ATOM	1181	N	PRO	A	152	1.346	-1.776	4.762	1.00	13.15	N
ATOM	1182	CA	PRO	A	152	0.722	-0.739	3.932	1.00	9.23	C
ATOM	1183	C	PRO	A	152	0.901	0.647	4.494	1.00	9.42	C
ATOM	1184	O	PRO	A	152	1.203	1.559	3.742	1.00	12.31	O
ATOM	1185	CB	PRO	A	152	-0.746	-1.137	3.863	1.00	3.96	C
ATOM	1186	CG	PRO	A	152	-0.950	-1.981	4.978	1.00	9.07	C
ATOM	1187	CD	PRO	A	152	0.329	-2.722	5.244	1.00	12.15	C
ATOM	1188	N	GLU	A	153	1.031	0.730	5.816	1.00	11.50	N
ATOM	1189	CA	GLU	A	153	1.234	2.006	6.514	1.00	9.86	C
ATOM	1190	C	GLU	A	153	2.605	2.638	6.305	1.00	10.68	C
ATOM	1191	O	GLU	A	153	2.752	3.857	6.337	1.00	9.78	O
ATOM	1192	CB	GLU	A	153	0.971	1.828	7.995	1.00	5.51	C
ATOM	1193	CG	GLU	A	153	-0.476	2.003	8.348	1.00	7.11	C
ATOM	1194	CD	GLU	A	153	-0.969	3.409	8.114	1.00	7.65	C
ATOM	1195	OE1	GLU	A	153	-0.136	4.313	8.022	1.00	5.80	O
ATOM	1196	OE2	GLU	A	153	-2.194	3.611	8.020	1.00	11.12	O1-
ATOM	1197	N	LEU	A	154	3.597	1.806	6.027	1.00	13.56	N
ATOM	1198	CA	LEU	A	154	4.861	2.287	5.484	1.00	17.58	C
ATOM	1199	C	LEU	A	154	4.729	2.816	4.045	1.00	19.77	C
ATOM	1200	O	LEU	A	154	5.245	3.881	3.731	1.00	19.71	O
ATOM	1201	CB	LEU	A	154	5.914	1.189	5.541	1.00	14.47	C
ATOM	1202	CG	LEU	A	154	7.016	1.644	6.467	1.00	16.08	C
ATOM	1203	CD1	LEU	A	154	8.162	0.670	6.454	1.00	16.69	C
ATOM	1204	CD2	LEU	A	154	7.461	3.019	6.022	1.00	19.40	C

ATOM	1205	N	LEU	A	155	3.982	2.112	3.201	1.00	20.63	N
ATOM	1206	CA	LEU	A	155	3.669	2.622	1.872	1.00	22.58	C
ATOM	1207	C	LEU	A	155	2.916	3.949	2.012	1.00	25.56	C
ATOM	1208	O	LEU	A	155	3.099	4.850	1.190	1.00	27.00	O
ATOM	1209	CB	LEU	A	155	2.801	1.636	1.075	1.00	19.65	C
ATOM	1210	CG	LEU	A	155	3.080	0.133	1.019	1.00	17.19	C
ATOM	1211	CD1	LEU	A	155	3.069	-0.273	-0.422	1.00	18.14	C
ATOM	1212	CD2	LEU	A	155	4.396	-0.259	1.647	1.00	17.17	C
ATOM	1213	N	PHE	A	156	2.120	4.101	3.079	1.00	26.64	N
ATOM	1214	CA	PHE	A	156	1.490	5.403	3.375	1.00	26.26	C
ATOM	1215	C	PHE	A	156	2.460	6.391	4.033	1.00	24.10	C
ATOM	1216	O	PHE	A	156	2.373	7.601	3.814	1.00	23.49	O
ATOM	1217	CB	PHE	A	156	0.240	5.268	4.260	1.00	23.92	C
ATOM	1218	CG	PHE	A	156	-0.286	6.590	4.749	1.00	21.57	C
ATOM	1219	CD1	PHE	A	156	-0.843	7.500	3.865	1.00	20.83	C
ATOM	1220	CD2	PHE	A	156	-0.113	6.977	6.066	1.00	20.34	C
ATOM	1221	CE1	PHE	A	156	-1.209	8.766	4.286	1.00	16.36	C
ATOM	1222	CE2	PHE	A	156	-0.481	8.251	6.492	1.00	17.60	C
ATOM	1223	CZ	PHE	A	156	-1.029	9.140	5.594	1.00	16.53	C
ATOM	1224	N	PHE	A	157	3.415	5.874	4.791	1.00	21.35	N
ATOM	1225	CA	PHE	A	157	4.441	6.724	5.339	1.00	21.42	C
ATOM	1226	C	PHE	A	157	5.657	6.859	4.427	1.00	22.33	C
ATOM	1227	O	PHE	A	157	6.712	7.303	4.879	1.00	23.73	O
ATOM	1228	CB	PHE	A	157	4.863	6.195	6.700	1.00	21.49	C
ATOM	1229	CG	PHE	A	157	4.238	6.920	7.846	1.00	17.83	C
ATOM	1230	CD1	PHE	A	157	3.628	8.139	7.652	1.00	17.24	C
ATOM	1231	CD2	PHE	A	157	4.376	6.444	9.120	1.00	19.41	C
ATOM	1232	CE1	PHE	A	157	3.197	8.872	8.688	1.00	14.49	C
ATOM	1233	CE2	PHE	A	157	3.948	7.170	10.159	1.00	18.81	C
ATOM	1234	CZ	PHE	A	157	3.362	8.398	9.940	1.00	20.97	C
ATOM	1235	N	ALA	A	158	5.524	6.405	3.175	1.00	23.41	N
ATOM	1236	CA	ALA	A	158	6.590	6.492	2.160	1.00	21.51	C
ATOM	1237	C	ALA	A	158	6.383	7.773	1.393	1.00	22.27	C
ATOM	1238	O	ALA	A	158	7.251	8.647	1.377	1.00	22.61	O
ATOM	1239	CB	ALA	A	158	6.526	5.321	1.199	1.00	16.28	C
ATOM	1240	N	LYS	A	159	5.185	7.930	0.840	1.00	22.44	N
ATOM	1241	CA	LYS	A	159	4.829	9.184	0.200	1.00	21.86	C
ATOM	1242	C	LYS	A	159	5.146	10.345	1.144	1.00	23.62	C
ATOM	1243	O	LYS	A	159	5.899	11.218	0.761	1.00	25.81	O
ATOM	1244	CB	LYS	A	159	3.358	9.187	-0.202	1.00	19.48	C
ATOM	1245	CG	LYS	A	159	3.096	8.664	-1.584	1.00	18.68	C
ATOM	1246	CD	LYS	A	159	4.087	7.579	-1.993	1.00	19.63	C
ATOM	1247	CE	LYS	A	159	3.781	7.040	-3.387	1.00	20.86	C
ATOM	1248	NZ	LYS	A	159	4.795	6.042	-3.824	1.00	23.26	N1+
ATOM	1249	N	ARG	A	160	4.850	10.195	2.436	1.00	23.94	N
ATOM	1250	CA	ARG	A	160	5.123	11.255	3.413	1.00	25.27	C
ATOM	1251	C	ARG	A	160	6.546	11.157	3.957	1.00	26.63	C
ATOM	1252	O	ARG	A	160	6.750	11.043	5.183	1.00	23.87	O
ATOM	1253	CB	ARG	A	160	4.135	11.184	4.583	1.00	28.93	C
ATOM	1254	CG	ARG	A	160	2.655	11.179	4.194	1.00	27.51	C
ATOM	1255	CD	ARG	A	160	2.030	12.549	4.347	1.00	25.69	C
ATOM	1256	NE	ARG	A	160	0.589	12.455	4.562	1.00	24.09	N
ATOM	1257	CZ	ARG	A	160	0.025	12.102	5.714	1.00	22.36	C
ATOM	1258	NH1	ARG	A	160	0.772	11.875	6.797	1.00	20.48	N1+
ATOM	1259	NH2	ARG	A	160	-1.292	11.998	5.786	1.00	19.93	N
ATOM	1260	N	TYR	A	161	7.468	10.909	3.020	1.00	26.96	N
ATOM	1261	CA	TYR	A	161	8.917	11.151	3.154	1.00	25.36	C
ATOM	1262	C	TYR	A	161	9.285	11.672	1.781	1.00	25.00	C
ATOM	1263	O	TYR	A	161	9.938	12.717	1.649	1.00	26.93	O
ATOM	1264	CB	TYR	A	161	9.666	9.839	3.404	1.00	22.15	C
ATOM	1265	CG	TYR	A	161	11.146	9.948	3.736	1.00	19.16	C
ATOM	1266	CD1	TYR	A	161	11.649	10.985	4.526	1.00	21.34	C
ATOM	1267	CD2	TYR	A	161	12.035	8.967	3.311	1.00	17.23	C
ATOM	1268	CE1	TYR	A	161	13.021	11.033	4.875	1.00	18.50	C
ATOM	1269	CE2	TYR	A	161	13.376	9.007	3.641	1.00	15.97	C
ATOM	1270	CZ	TYR	A	161	13.870	10.035	4.411	1.00	16.75	C
ATOM	1271	OH	TYR	A	161	15.220	10.080	4.642	1.00	14.91	O
ATOM	1272	N	LYS	A	162	8.684	11.030	0.776	1.00	24.44	N
ATOM	1273	CA	LYS	A	162	8.762	11.445	-0.629	1.00	20.54	C
ATOM	1274	C	LYS	A	162	8.217	12.847	-0.779	1.00	18.06	C
ATOM	1275	O	LYS	A	162	8.972	13.809	-0.711	1.00	18.82	O

ATOM	1276	CB	LYS	A	162	7.963	10.477	-1.508	1.00	19.05	C
ATOM	1277	CG	LYS	A	162	8.158	10.649	-3.005	1.00	18.72	C
ATOM	1278	CD	LYS	A	162	7.086	11.530	-3.600	1.00	15.41	C
ATOM	1279	CE	LYS	A	162	6.906	11.243	-5.053	1.00	13.03	C
ATOM	1280	NZ	LYS	A	162	6.676	9.809	-5.269	1.00	14.01	N1+
ATOM	1281	N	ALA	A	163	6.893	12.947	-0.846	1.00	17.36	N
ATOM	1282	CA	ALA	A	163	6.153	14.205	-0.954	1.00	17.24	C
ATOM	1283	C	ALA	A	163	6.795	15.380	-0.258	1.00	17.12	C
ATOM	1284	O	ALA	A	163	6.690	16.493	-0.748	1.00	19.51	O
ATOM	1285	CB	ALA	A	163	4.736	14.030	-0.439	1.00	14.73	C
ATOM	1286	N	ALA	A	164	7.419	15.144	0.894	1.00	16.39	N
ATOM	1287	CA	ALA	A	164	8.122	16.201	1.603	1.00	17.36	C
ATOM	1288	C	ALA	A	164	9.253	16.693	0.709	1.00	19.77	C
ATOM	1289	O	ALA	A	164	9.142	17.759	0.114	1.00	20.30	O
ATOM	1290	CB	ALA	A	164	8.670	15.686	2.930	1.00	15.34	C
ATOM	1291	N	PHE	A	165	10.238	15.827	0.466	1.00	21.94	N
ATOM	1292	CA	PHE	A	165	11.379	16.135	-0.393	1.00	20.00	C
ATOM	1293	C	PHE	A	165	10.864	16.794	-1.664	1.00	19.97	C
ATOM	1294	O	PHE	A	165	11.217	17.951	-1.933	1.00	19.72	O
ATOM	1295	CB	PHE	A	165	12.108	14.842	-0.765	1.00	24.10	C
ATOM	1296	CG	PHE	A	165	13.261	14.491	0.139	1.00	26.13	C
ATOM	1297	CD1	PHE	A	165	13.084	14.331	1.495	1.00	26.42	C
ATOM	1298	CD2	PHE	A	165	14.505	14.200	-0.396	1.00	27.17	C
ATOM	1299	CE1	PHE	A	165	14.128	13.891	2.287	1.00	24.89	C
ATOM	1300	CE2	PHE	A	165	15.536	13.758	0.397	1.00	22.89	C
ATOM	1301	CZ	PHE	A	165	15.350	13.609	1.730	1.00	22.00	C
ATOM	1302	N	THR	A	166	9.807	16.176	-2.209	1.00	18.51	N
ATOM	1303	CA	THR	A	166	9.151	16.502	-3.488	1.00	17.70	C
ATOM	1304	C	THR	A	166	8.432	17.857	-3.457	1.00	20.02	C
ATOM	1305	O	THR	A	166	7.358	18.038	-4.048	1.00	21.09	O
ATOM	1306	CB	THR	A	166	8.105	15.409	-3.838	1.00	18.48	C
ATOM	1307	CG2	THR	A	166	7.511	15.601	-5.242	1.00	15.89	C
ATOM	1308	OG1	THR	A	166	8.715	14.114	-3.735	1.00	18.39	O
ATOM	1309	N	GLU	A	167	8.978	18.778	-2.677	1.00	20.35	N
ATOM	1310	CA	GLU	A	167	8.511	20.145	-2.670	1.00	20.28	C
ATOM	1311	C	GLU	A	167	9.603	21.010	-2.066	1.00	18.79	C
ATOM	1312	O	GLU	A	167	10.110	21.924	-2.699	1.00	19.11	O
ATOM	1313	CB	GLU	A	167	7.243	20.228	-1.846	1.00	20.88	C
ATOM	1314	CG	GLU	A	167	6.759	21.612	-1.587	1.00	26.70	C
ATOM	1315	CD	GLU	A	167	5.856	21.656	-0.377	1.00	29.94	C
ATOM	1316	OE1	GLU	A	167	4.740	21.074	-0.432	1.00	32.74	O
ATOM	1317	OE2	GLU	A	167	6.300	22.200	0.658	1.00	32.31	O1-
ATOM	1318	N	CYS	A	168	10.066	20.636	-0.895	1.00	19.65	N
ATOM	1319	CA	CYS	A	168	10.978	21.490	-0.205	1.00	22.23	C
ATOM	1320	C	CYS	A	168	12.291	20.781	-0.033	1.00	25.31	C
ATOM	1321	O	CYS	A	168	12.626	20.370	1.077	1.00	29.59	O
ATOM	1322	CB	CYS	A	168	10.395	21.919	1.147	1.00	22.76	C
ATOM	1323	SG	CYS	A	168	11.603	22.432	2.429	1.00	26.02	S
ATOM	1324	N	CYS	A	169	13.009	20.566	-1.136	1.00	24.80	N
ATOM	1325	CA	CYS	A	169	14.459	20.798	-1.101	1.00	27.27	C
ATOM	1326	C	CYS	A	169	14.569	22.293	-1.412	1.00	26.49	C
ATOM	1327	O	CYS	A	169	15.379	23.015	-0.802	1.00	26.20	O
ATOM	1328	CB	CYS	A	169	15.190	19.988	-2.194	1.00	30.98	C
ATOM	1329	SG	CYS	A	169	15.841	18.333	-1.718	1.00	33.25	S
ATOM	1330	N	GLN	A	170	13.492	22.748	-2.059	1.00	26.22	N
ATOM	1331	CA	GLN	A	170	13.353	23.983	-2.844	1.00	25.86	C
ATOM	1332	C	GLN	A	170	13.998	25.203	-2.207	1.00	26.18	C
ATOM	1333	O	GLN	A	170	15.202	25.251	-2.033	1.00	30.02	O
ATOM	1334	CB	GLN	A	170	11.842	24.269	-3.085	1.00	25.67	C
ATOM	1335	CG	GLN	A	170	11.397	24.518	-4.531	1.00	21.68	C
ATOM	1336	CD	GLN	A	170	11.373	23.257	-5.393	1.00	20.70	C
ATOM	1337	NE2	GLN	A	170	12.540	22.814	-5.816	1.00	20.61	N
ATOM	1338	OE1	GLN	A	170	10.321	22.737	-5.727	1.00	16.98	O
ATOM	1339	N	ALA	A	171	13.192	26.161	-1.785	1.00	25.17	N
ATOM	1340	CA	ALA	A	171	13.718	27.493	-1.587	1.00	22.37	C
ATOM	1341	C	ALA	A	171	14.440	27.547	-0.279	1.00	23.13	C
ATOM	1342	O	ALA	A	171	15.176	28.489	-0.017	1.00	25.63	O
ATOM	1343	CB	ALA	A	171	12.619	28.501	-1.608	1.00	24.39	C
ATOM	1344	N	ALA	A	172	14.170	26.578	0.583	1.00	22.80	N
ATOM	1345	CA	ALA	A	172	14.686	26.649	1.935	1.00	23.27	C
ATOM	1346	C	ALA	A	172	15.967	25.845	2.129	1.00	23.80	C

ATOM	1347	O	ALA	A	172	16.315	25.519	3.270	1.00	21.53	O
ATOM	1348	CB	ALA	A	172	13.634	26.207	2.915	1.00	21.51	C
ATOM	1349	N	ASP	A	173	16.684	25.569	1.031	1.00	25.42	N
ATOM	1350	CA	ASP	A	173	17.901	24.751	1.088	1.00	28.45	C
ATOM	1351	C	ASP	A	173	17.612	23.425	1.779	1.00	30.18	C
ATOM	1352	O	ASP	A	173	18.403	22.987	2.608	1.00	31.67	O
ATOM	1353	CB	ASP	A	173	18.973	25.462	1.906	1.00	29.65	C
ATOM	1354	CG	ASP	A	173	19.953	26.208	1.057	1.00	30.99	C
ATOM	1355	OD1	ASP	A	173	19.492	27.029	0.227	1.00	32.55	O
ATOM	1356	OD2	ASP	A	173	21.176	25.999	1.265	1.00	32.46	O1-
ATOM	1357	N	LYS	A	174	16.377	22.957	1.652	1.00	30.45	N
ATOM	1358	CA	LYS	A	174	15.795	21.965	2.549	1.00	29.08	C
ATOM	1359	C	LYS	A	174	15.766	22.368	4.036	1.00	28.75	C
ATOM	1360	O	LYS	A	174	15.050	21.761	4.840	1.00	29.82	O
ATOM	1361	CB	LYS	A	174	16.501	20.618	2.369	1.00	29.28	C
ATOM	1362	CG	LYS	A	174	17.744	20.415	3.213	1.00	28.90	C
ATOM	1363	CD	LYS	A	174	17.508	19.425	4.326	1.00	28.34	C
ATOM	1364	CE	LYS	A	174	18.696	19.385	5.263	1.00	28.62	C
ATOM	1365	NZ	LYS	A	174	19.405	18.085	5.065	1.00	31.78	N1+
ATOM	1366	N	ALA	A	175	16.507	23.402	4.401	1.00	26.56	N
ATOM	1367	CA	ALA	A	175	16.781	23.678	5.795	1.00	27.02	C
ATOM	1368	C	ALA	A	175	15.532	23.529	6.661	1.00	27.16	C
ATOM	1369	O	ALA	A	175	15.266	22.457	7.181	1.00	27.67	O
ATOM	1370	CB	ALA	A	175	17.359	25.092	5.929	1.00	29.25	C
ATOM	1371	N	ALA	A	176	14.672	24.542	6.602	1.00	26.48	N
ATOM	1372	CA	ALA	A	176	13.614	24.748	7.567	1.00	20.96	C
ATOM	1373	C	ALA	A	176	12.325	24.254	6.976	1.00	21.35	C
ATOM	1374	O	ALA	A	176	11.676	23.432	7.557	1.00	22.19	O
ATOM	1375	CB	ALA	A	176	13.506	26.217	7.899	1.00	20.23	C
ATOM	1376	N	CYS	A	177	11.973	24.711	5.784	1.00	22.81	N
ATOM	1377	CA	CYS	A	177	10.706	24.305	5.168	1.00	25.45	C
ATOM	1378	C	CYS	A	177	10.548	22.808	4.974	1.00	25.72	C
ATOM	1379	O	CYS	A	177	9.532	22.387	4.413	1.00	25.67	O
ATOM	1380	CB	CYS	A	177	10.498	24.980	3.800	1.00	28.47	C
ATOM	1381	SG	CYS	A	177	11.590	24.464	2.414	1.00	27.41	S
ATOM	1382	N	LEU	A	178	11.645	22.068	5.169	1.00	25.62	N
ATOM	1383	CA	LEU	A	178	11.655	20.608	5.049	1.00	25.90	C
ATOM	1384	C	LEU	A	178	11.677	19.970	6.433	1.00	27.85	C
ATOM	1385	O	LEU	A	178	10.620	19.599	6.972	1.00	31.37	O
ATOM	1386	CB	LEU	A	178	12.880	20.117	4.255	1.00	23.18	C
ATOM	1387	CG	LEU	A	178	12.918	18.765	3.515	1.00	22.71	C
ATOM	1388	CD1	LEU	A	178	14.366	18.315	3.373	1.00	15.42	C
ATOM	1389	CD2	LEU	A	178	12.073	17.684	4.217	1.00	19.52	C
ATOM	1390	N	LEU	A	179	12.858	19.897	7.046	1.00	24.44	N
ATOM	1391	CA	LEU	A	179	13.079	18.960	8.143	1.00	23.00	C
ATOM	1392	C	LEU	A	179	12.215	19.038	9.449	1.00	23.84	C
ATOM	1393	O	LEU	A	179	12.326	18.165	10.315	1.00	22.67	O
ATOM	1394	CB	LEU	A	179	14.588	18.940	8.460	1.00	21.35	C
ATOM	1395	CG	LEU	A	179	15.248	19.579	9.697	1.00	23.42	C
ATOM	1396	CD1	LEU	A	179	16.763	19.387	9.589	1.00	22.06	C
ATOM	1397	CD2	LEU	A	179	14.898	21.062	9.845	1.00	18.81	C
ATOM	1398	N	PRO	A	180	11.301	20.026	9.578	1.00	24.90	N
ATOM	1399	CA	PRO	A	180	10.275	19.957	10.637	1.00	25.32	C
ATOM	1400	C	PRO	A	180	9.020	19.164	10.271	1.00	25.47	C
ATOM	1401	O	PRO	A	180	8.078	19.034	11.074	1.00	24.17	O
ATOM	1402	CB	PRO	A	180	9.956	21.425	10.914	1.00	25.04	C
ATOM	1403	CG	PRO	A	180	10.217	22.072	9.597	1.00	22.93	C
ATOM	1404	CD	PRO	A	180	11.523	21.427	9.210	1.00	24.99	C
ATOM	1405	N	LYS	A	181	9.018	18.641	9.054	1.00	24.23	N
ATOM	1406	CA	LYS	A	181	8.168	17.507	8.701	1.00	23.92	C
ATOM	1407	C	LYS	A	181	9.027	16.222	8.798	1.00	22.82	C
ATOM	1408	O	LYS	A	181	8.584	15.135	8.454	1.00	20.58	O
ATOM	1409	CB	LYS	A	181	7.615	17.711	7.286	1.00	25.23	C
ATOM	1410	CG	LYS	A	181	7.840	19.139	6.771	1.00	23.39	C
ATOM	1411	CD	LYS	A	181	7.528	19.289	5.312	1.00	21.94	C
ATOM	1412	CE	LYS	A	181	6.048	19.541	5.120	1.00	22.34	C
ATOM	1413	NZ	LYS	A	181	5.471	20.266	6.296	1.00	24.22	N1+
ATOM	1414	N	LEU	A	182	10.231	16.372	9.354	1.00	21.40	N
ATOM	1415	CA	LEU	A	182	11.159	15.277	9.612	1.00	18.92	C
ATOM	1416	C	LEU	A	182	11.513	15.303	11.107	1.00	18.56	C
ATOM	1417	O	LEU	A	182	12.482	14.685	11.539	1.00	16.25	O

ATOM	1418	CB	LEU	A	182	12.431	15.475	8.777	1.00	19.22	C
ATOM	1419	CG	LEU	A	182	12.869	14.556	7.621	1.00	20.67	C
ATOM	1420	CD1	LEU	A	182	12.740	13.115	8.064	1.00	22.41	C
ATOM	1421	CD2	LEU	A	182	12.070	14.796	6.342	1.00	16.92	C
ATOM	1422	N	ASP	A	183	10.857	16.186	11.849	1.00	19.20	N
ATOM	1423	CA	ASP	A	183	10.839	16.085	13.305	1.00	21.07	C
ATOM	1424	C	ASP	A	183	9.608	15.238	13.640	1.00	21.27	C
ATOM	1425	O	ASP	A	183	9.693	14.015	13.759	1.00	20.65	O
ATOM	1426	CB	ASP	A	183	10.731	17.485	13.960	1.00	22.49	C
ATOM	1427	CG	ASP	A	183	12.064	18.279	13.924	1.00	24.78	C
ATOM	1428	OD1	ASP	A	183	12.922	18.040	14.805	1.00	22.96	O
ATOM	1429	OD2	ASP	A	183	12.261	19.129	13.018	1.00	24.01	O1-
ATOM	1430	N	GLU	A	184	8.443	15.856	13.510	1.00	20.83	N
ATOM	1431	CA	GLU	A	184	7.190	15.210	13.853	1.00	20.58	C
ATOM	1432	C	GLU	A	184	7.081	13.767	13.329	1.00	19.58	C
ATOM	1433	O	GLU	A	184	7.119	12.822	14.118	1.00	18.60	O
ATOM	1434	CB	GLU	A	184	6.021	16.067	13.356	1.00	21.76	C
ATOM	1435	CG	GLU	A	184	4.698	15.723	13.997	1.00	25.58	C
ATOM	1436	CD	GLU	A	184	3.531	15.959	13.071	1.00	27.71	C
ATOM	1437	OE1	GLU	A	184	3.257	17.145	12.760	1.00	26.41	O
ATOM	1438	OE2	GLU	A	184	2.892	14.954	12.659	1.00	29.24	O1-
ATOM	1439	N	LEU	A	185	7.114	13.580	12.015	1.00	19.28	N
ATOM	1440	CA	LEU	A	185	6.872	12.254	11.438	1.00	21.28	C
ATOM	1441	C	LEU	A	185	8.027	11.229	11.664	1.00	21.48	C
ATOM	1442	O	LEU	A	185	8.321	10.422	10.797	1.00	20.44	O
ATOM	1443	CB	LEU	A	185	6.549	12.387	9.930	1.00	21.87	C
ATOM	1444	CG	LEU	A	185	5.217	13.009	9.440	1.00	24.75	C
ATOM	1445	CD1	LEU	A	185	5.400	14.429	8.858	1.00	21.49	C
ATOM	1446	CD2	LEU	A	185	4.605	12.100	8.376	1.00	22.23	C
ATOM	1447	N	ARG	A	186	8.728	11.323	12.789	1.00	21.60	N
ATOM	1448	CA	ARG	A	186	9.692	10.304	13.191	1.00	20.65	C
ATOM	1449	C	ARG	A	186	9.175	9.608	14.448	1.00	23.63	C
ATOM	1450	O	ARG	A	186	9.353	8.393	14.626	1.00	24.05	O
ATOM	1451	CB	ARG	A	186	11.036	10.941	13.514	1.00	21.81	C
ATOM	1452	CG	ARG	A	186	11.149	11.524	14.926	1.00	20.40	C
ATOM	1453	CD	ARG	A	186	12.527	11.273	15.525	1.00	22.73	C
ATOM	1454	NE	ARG	A	186	12.739	9.855	15.758	1.00	24.25	N
ATOM	1455	CZ	ARG	A	186	13.468	9.358	16.750	1.00	26.77	C
ATOM	1456	NH1	ARG	A	186	14.043	10.164	17.638	1.00	26.94	N1+
ATOM	1457	NH2	ARG	A	186	13.561	8.042	16.896	1.00	28.22	N
ATOM	1458	N	ASP	A	187	8.589	10.399	15.349	1.00	23.17	N
ATOM	1459	CA	ASP	A	187	7.844	9.858	16.463	1.00	20.77	C
ATOM	1460	C	ASP	A	187	6.644	9.094	15.937	1.00	18.87	C
ATOM	1461	O	ASP	A	187	6.412	7.993	16.382	1.00	18.84	O
ATOM	1462	CB	ASP	A	187	7.385	10.972	17.388	1.00	23.77	C
ATOM	1463	CG	ASP	A	187	8.523	11.556	18.208	1.00	26.43	C
ATOM	1464	OD1	ASP	A	187	8.918	10.937	19.241	1.00	27.86	O
ATOM	1465	OD2	ASP	A	187	8.981	12.669	17.847	1.00	26.15	O1-
ATOM	1466	N	GLU	A	188	6.000	9.594	14.880	1.00	18.08	N
ATOM	1467	CA	GLU	A	188	4.861	8.894	14.247	1.00	18.47	C
ATOM	1468	C	GLU	A	188	5.280	7.641	13.475	1.00	18.83	C
ATOM	1469	O	GLU	A	188	4.440	6.970	12.890	1.00	18.98	O
ATOM	1470	CB	GLU	A	188	4.074	9.840	13.299	1.00	16.29	C
ATOM	1471	CG	GLU	A	188	2.648	9.362	12.934	1.00	12.67	C
ATOM	1472	CD	GLU	A	188	1.770	10.425	12.231	1.00	16.08	C
ATOM	1473	OE1	GLU	A	188	2.195	11.591	12.086	1.00	16.21	O
ATOM	1474	OE2	GLU	A	188	0.607	10.109	11.882	1.00	14.17	O1-
ATOM	1475	N	GLY	A	189	6.587	7.418	13.355	1.00	20.49	N
ATOM	1476	CA	GLY	A	189	7.098	6.195	12.753	1.00	19.35	C
ATOM	1477	C	GLY	A	189	7.221	5.173	13.857	1.00	18.26	C
ATOM	1478	O	GLY	A	189	6.532	4.161	13.867	1.00	18.56	O
ATOM	1479	N	LYS	A	190	7.964	5.536	14.886	1.00	20.08	N
ATOM	1480	CA	LYS	A	190	7.903	4.816	16.152	1.00	22.77	C
ATOM	1481	C	LYS	A	190	6.463	4.574	16.647	1.00	22.46	C
ATOM	1482	O	LYS	A	190	6.120	3.434	16.940	1.00	24.59	O
ATOM	1483	CB	LYS	A	190	8.710	5.555	17.232	1.00	24.21	C
ATOM	1484	CG	LYS	A	190	10.186	5.699	16.889	1.00	27.27	C
ATOM	1485	CD	LYS	A	190	11.034	5.974	18.115	1.00	31.27	C
ATOM	1486	CE	LYS	A	190	10.959	7.431	18.550	1.00	32.12	C
ATOM	1487	NZ	LYS	A	190	12.010	7.723	19.570	1.00	31.95	N1+
ATOM	1488	N	ALA	A	191	5.594	5.589	16.605	1.00	20.34	N

ATOM	1489	CA	ALA	A	191	4.280	5.495	17.239	1.00	17.99	C
ATOM	1490	C	ALA	A	191	3.575	4.269	16.726	1.00	17.52	C
ATOM	1491	O	ALA	A	191	3.591	3.250	17.391	1.00	21.21	O
ATOM	1492	CB	ALA	A	191	3.442	6.712	16.971	1.00	17.43	C
ATOM	1493	N	SER	A	192	3.200	4.269	15.458	1.00	16.48	N
ATOM	1494	CA	SER	A	192	2.445	3.151	14.932	1.00	15.33	C
ATOM	1495	C	SER	A	192	3.246	1.855	14.918	1.00	17.13	C
ATOM	1496	O	SER	A	192	2.673	0.771	15.078	1.00	18.89	O
ATOM	1497	CB	SER	A	192	1.943	3.446	13.538	1.00	14.90	C
ATOM	1498	OG	SER	A	192	1.128	2.380	13.116	1.00	19.59	O
ATOM	1499	N	SER	A	193	4.567	1.946	14.777	1.00	13.75	N
ATOM	1500	CA	SER	A	193	5.377	0.738	14.665	1.00	11.93	C
ATOM	1501	C	SER	A	193	5.408	0.064	15.996	1.00	10.26	C
ATOM	1502	O	SER	A	193	6.136	-0.909	16.173	1.00	8.48	O
ATOM	1503	CB	SER	A	193	6.802	1.089	14.258	1.00	15.39	C
ATOM	1504	OG	SER	A	193	7.526	1.680	15.322	1.00	15.80	O
ATOM	1505	N	ALA	A	194	4.916	0.833	16.965	1.00	13.13	N
ATOM	1506	CA	ALA	A	194	4.875	0.494	18.384	1.00	14.96	C
ATOM	1507	C	ALA	A	194	3.436	0.431	18.859	1.00	12.28	C
ATOM	1508	O	ALA	A	194	3.117	-0.360	19.733	1.00	16.44	O
ATOM	1509	CB	ALA	A	194	5.647	1.543	19.205	1.00	14.37	C
ATOM	1510	N	LYS	A	195	2.560	1.162	18.186	1.00	8.87	N
ATOM	1511	CA	LYS	A	195	1.129	1.081	18.415	1.00	10.05	C
ATOM	1512	C	LYS	A	195	0.656	-0.181	17.755	1.00	9.99	C
ATOM	1513	O	LYS	A	195	-0.535	-0.421	17.682	1.00	12.22	O
ATOM	1514	CB	LYS	A	195	0.390	2.267	17.767	1.00	12.99	C
ATOM	1515	CG	LYS	A	195	0.478	3.588	18.531	1.00	15.37	C
ATOM	1516	CD	LYS	A	195	0.179	4.787	17.664	1.00	16.04	C
ATOM	1517	CE	LYS	A	195	-1.184	5.396	17.995	1.00	19.24	C
ATOM	1518	NZ	LYS	A	195	-1.397	6.691	17.246	1.00	20.94	N1+
ATOM	1519	N	GLN	A	196	1.586	-0.882	17.112	1.00	13.42	N
ATOM	1520	CA	GLN	A	196	1.302	-2.120	16.370	1.00	13.91	C
ATOM	1521	C	GLN	A	196	1.790	-3.377	17.084	1.00	13.37	C
ATOM	1522	O	GLN	A	196	0.998	-4.282	17.270	1.00	15.65	O
ATOM	1523	CB	GLN	A	196	1.923	-2.071	14.971	1.00	13.77	C
ATOM	1524	CG	GLN	A	196	1.763	-3.343	14.183	1.00	15.75	C
ATOM	1525	CD	GLN	A	196	0.630	-3.266	13.192	1.00	20.39	C
ATOM	1526	NE2	GLN	A	196	-0.021	-2.104	13.132	1.00	21.97	N
ATOM	1527	OE1	GLN	A	196	0.344	-4.228	12.470	1.00	19.31	O
ATOM	1528	N	ARG	A	197	3.063	-3.437	17.495	1.00	10.81	N
ATOM	1529	CA	ARG	A	197	3.666	-4.683	17.989	1.00	10.56	C
ATOM	1530	C	ARG	A	197	2.685	-5.310	18.950	1.00	12.83	C
ATOM	1531	O	ARG	A	197	2.476	-6.508	18.910	1.00	14.23	O
ATOM	1532	CB	ARG	A	197	5.014	-4.404	18.679	1.00	11.17	C
ATOM	1533	CG	ARG	A	197	5.808	-5.620	19.258	1.00	11.07	C
ATOM	1534	CD	ARG	A	197	5.853	-6.866	18.353	1.00	8.47	C
ATOM	1535	NE	ARG	A	197	6.520	-8.013	18.986	1.00	6.63	N
ATOM	1536	CZ	ARG	A	197	5.931	-9.185	19.260	1.00	8.70	C
ATOM	1537	NH1	ARG	A	197	4.618	-9.319	19.201	1.00	7.16	N1+
ATOM	1538	NH2	ARG	A	197	6.645	-10.211	19.706	1.00	7.19	N
ATOM	1539	N	LEU	A	198	1.906	-4.441	19.595	1.00	14.31	N
ATOM	1540	CA	LEU	A	198	0.664	-4.783	20.286	1.00	15.62	C
ATOM	1541	C	LEU	A	198	-0.305	-5.651	19.460	1.00	18.97	C
ATOM	1542	O	LEU	A	198	-0.561	-6.800	19.835	1.00	22.05	O
ATOM	1543	CB	LEU	A	198	-0.047	-3.501	20.714	1.00	12.42	C
ATOM	1544	CG	LEU	A	198	-0.455	-3.324	22.174	1.00	13.86	C
ATOM	1545	CD1	LEU	A	198	-1.936	-2.970	22.232	1.00	13.35	C
ATOM	1546	CD2	LEU	A	198	-0.162	-4.573	22.987	1.00	10.76	C
ATOM	1547	N	LYS	A	199	-0.925	-5.076	18.423	1.00	18.33	N
ATOM	1548	CA	LYS	A	199	-1.898	-5.785	17.578	1.00	18.04	C
ATOM	1549	C	LYS	A	199	-1.443	-7.160	17.098	1.00	19.50	O
ATOM	1550	O	LYS	A	199	-2.262	-7.986	16.724	1.00	20.23	C
ATOM	1551	CB	LYS	A	199	-2.249	-4.949	16.355	1.00	18.92	C
ATOM	1552	CG	LYS	A	199	-3.608	-4.261	16.389	1.00	18.14	C
ATOM	1553	CD	LYS	A	199	-3.598	-2.944	15.594	1.00	13.47	C
ATOM	1554	CE	LYS	A	199	-2.700	-1.907	16.227	1.00	8.90	C
ATOM	1555	NZ	LYS	A	199	-2.448	-2.218	17.659	1.00	9.83	N1+
ATOM	1556	N	CYS	A	200	-0.140	-7.375	17.001	1.00	21.92	N
ATOM	1557	CA	CYS	A	200	0.372	-8.717	16.755	1.00	23.15	C
ATOM	1558	C	CYS	A	200	0.459	-9.453	18.071	1.00	25.39	C
ATOM	1559	O	CYS	A	200	0.080	-10.614	18.142	1.00	29.62	O

ATOM	1560	CB	CYS	A	200	1.762	-8.682	16.118	1.00	22.40	C
ATOM	1561	SG	CYS	A	200	1.793	-7.924	14.469	1.00	21.69	S
ATOM	1562	N	ALA	A	201	0.949	-8.778	19.114	1.00	26.47	N
ATOM	1563	CA	ALA	A	201	1.139	-9.381	20.440	1.00	23.93	C
ATOM	1564	C	ALA	A	201	-0.165	-9.943	20.993	1.00	21.85	C
ATOM	1565	O	ALA	A	201	-0.208	-11.107	21.360	1.00	20.07	O
ATOM	1566	CB	ALA	A	201	1.740	-8.371	21.408	1.00	24.67	C
ATOM	1567	N	SER	A	202	-1.245	-9.173	20.919	1.00	20.21	N
ATOM	1568	CA	SER	A	202	-2.584	-9.760	20.944	1.00	22.62	C
ATOM	1569	C	SER	A	202	-2.608	-11.018	20.056	1.00	23.67	C
ATOM	1570	O	SER	A	202	-2.798	-12.128	20.544	1.00	24.94	O
ATOM	1571	CB	SER	A	202	-3.644	-8.779	20.400	1.00	23.40	C
ATOM	1572	OG	SER	A	202	-3.857	-7.642	21.221	1.00	23.09	O
ATOM	1573	N	LEU	A	203	-2.326	-10.847	18.765	1.00	24.01	N
ATOM	1574	CA	LEU	A	203	-2.674	-11.850	17.762	1.00	22.30	C
ATOM	1575	C	LEU	A	203	-2.159	-13.281	17.940	1.00	20.69	C
ATOM	1576	O	LEU	A	203	-2.961	-14.201	17.903	1.00	20.01	O
ATOM	1577	CB	LEU	A	203	-2.320	-11.341	16.368	1.00	21.07	C
ATOM	1578	CG	LEU	A	203	-3.523	-11.255	15.429	1.00	20.68	C
ATOM	1579	CD1	LEU	A	203	-4.289	-12.558	15.445	1.00	22.29	C
ATOM	1580	CD2	LEU	A	203	-4.410	-10.140	15.868	1.00	20.27	C
ATOM	1581	N	GLN	A	204	-0.843	-13.487	17.919	1.00	20.66	N
ATOM	1582	CA	GLN	A	204	-0.277	-14.834	18.099	1.00	23.10	C
ATOM	1583	C	GLN	A	204	1.062	-14.932	18.874	1.00	24.84	C
ATOM	1584	O	GLN	A	204	1.816	-15.917	18.736	1.00	25.14	O
ATOM	1585	CB	GLN	A	204	-0.135	-15.567	16.762	1.00	22.96	C
ATOM	1586	CG	GLN	A	204	-0.633	-14.814	15.556	1.00	24.32	C
ATOM	1587	CD	GLN	A	204	0.297	-14.952	14.367	1.00	23.07	C
ATOM	1588	NE2	GLN	A	204	0.408	-13.888	13.570	1.00	22.46	N
ATOM	1589	OE1	GLN	A	204	0.920	-15.990	14.175	1.00	21.96	O
ATOM	1590	N	LYS	A	205	1.345	-13.922	19.695	1.00	21.97	N
ATOM	1591	CA	LYS	A	205	2.050	-14.152	20.952	1.00	18.40	C
ATOM	1592	C	LYS	A	205	0.998	-14.276	22.063	1.00	14.76	C
ATOM	1593	O	LYS	A	205	1.311	-14.599	23.192	1.00	13.45	O
ATOM	1594	CB	LYS	A	205	3.020	-13.007	21.232	1.00	19.14	C
ATOM	1595	CG	LYS	A	205	2.841	-12.327	22.558	1.00	18.87	C
ATOM	1596	CD	LYS	A	205	3.969	-12.710	23.485	1.00	21.97	C
ATOM	1597	CE	LYS	A	205	5.126	-11.720	23.351	1.00	23.57	C
ATOM	1598	NZ	LYS	A	205	6.410	-12.330	23.789	1.00	23.75	N1+
ATOM	1599	N	PHE	A	206	-0.253	-14.040	21.707	1.00	12.24	N
ATOM	1600	CA	PHE	A	206	-1.395	-14.291	22.578	1.00	13.28	C
ATOM	1601	C	PHE	A	206	-2.440	-14.872	21.656	1.00	13.87	C
ATOM	1602	O	PHE	A	206	-2.389	-14.638	20.459	1.00	15.15	O
ATOM	1603	CB	PHE	A	206	-1.945	-12.972	23.110	1.00	14.11	C
ATOM	1604	CG	PHE	A	206	-1.995	-12.870	24.594	1.00	8.89	C
ATOM	1605	CD1	PHE	A	206	-0.961	-12.280	25.264	1.00	7.13	C
ATOM	1606	CD2	PHE	A	206	-3.173	-13.071	25.251	1.00	6.33	C
ATOM	1607	CE1	PHE	A	206	-1.102	-11.880	26.508	1.00	7.41	C
ATOM	1608	CE2	PHE	A	206	-3.317	-12.670	26.507	1.00	8.37	C
ATOM	1609	CZ	PHE	A	206	-2.278	-12.066	27.139	1.00	9.60	C
ATOM	1610	N	GLY	A	207	-3.502	-15.416	22.230	1.00	14.43	N
ATOM	1611	CA	GLY	A	207	-4.553	-16.003	21.425	1.00	14.40	C
ATOM	1612	C	GLY	A	207	-5.095	-15.066	20.366	1.00	15.46	C
ATOM	1613	O	GLY	A	207	-5.411	-13.904	20.628	1.00	16.20	O
ATOM	1614	N	GLU	A	208	-5.330	-15.625	19.192	1.00	15.63	N
ATOM	1615	CA	GLU	A	208	-5.998	-14.904	18.125	1.00	18.59	C
ATOM	1616	C	GLU	A	208	-7.446	-14.492	18.494	1.00	19.71	C
ATOM	1617	O	GLU	A	208	-7.997	-13.540	17.917	1.00	21.56	O
ATOM	1618	CB	GLU	A	208	-5.971	-15.761	16.845	1.00	18.16	C
ATOM	1619	CG	GLU	A	208	-7.133	-16.747	16.691	1.00	18.76	C
ATOM	1620	CD	GLU	A	208	-8.245	-16.193	15.814	1.00	19.03	C
ATOM	1621	OE1	GLU	A	208	-8.448	-14.963	15.793	1.00	18.38	O
ATOM	1622	OE2	GLU	A	208	-8.860	-16.979	15.069	1.00	22.62	O1-
ATOM	1623	N	ARG	A	209	-8.083	-15.253	19.389	1.00	18.66	N
ATOM	1624	CA	ARG	A	209	-9.477	-15.021	19.769	1.00	17.70	C
ATOM	1625	C	ARG	A	209	-9.626	-13.656	20.423	1.00	18.80	C
ATOM	1626	O	ARG	A	209	-10.580	-12.930	20.170	1.00	17.41	O
ATOM	1627	CB	ARG	A	209	-9.939	-16.095	20.751	1.00	17.78	C
ATOM	1628	CG	ARG	A	209	-11.325	-16.650	20.479	1.00	22.53	C
ATOM	1629	CD	ARG	A	209	-12.149	-15.748	19.536	1.00	23.84	C
ATOM	1630	NE	ARG	A	209	-12.523	-14.506	20.204	1.00	25.57	N

ATOM	1631	CZ	ARG	A	209	-13.644	-13.825	19.989	1.00	25.17	C
ATOM	1632	NH1	ARG	A	209	-14.470	-14.180	19.011	1.00	27.58	N1+
ATOM	1633	NH2	ARG	A	209	-13.900	-12.739	20.714	1.00	24.46	N
ATOM	1634	N	ALA	A	210	-8.623	-13.292	21.210	1.00	22.42	N
ATOM	1635	CA	ALA	A	210	-8.644	-12.078	21.995	1.00	25.29	C
ATOM	1636	C	ALA	A	210	-8.974	-10.918	21.071	1.00	27.14	C
ATOM	1637	O	ALA	A	210	-10.042	-10.313	21.208	1.00	29.89	O
ATOM	1638	CB	ALA	A	210	-7.289	-11.867	22.666	1.00	24.38	C
ATOM	1639	N	PHE	A	211	-8.173	-10.760	20.012	1.00	26.77	N
ATOM	1640	CA	PHE	A	211	-8.289	-9.629	19.081	1.00	23.38	C
ATOM	1641	C	PHE	A	211	-9.721	-9.257	18.741	1.00	21.80	C
ATOM	1642	O	PHE	A	211	-10.079	-8.090	18.838	1.00	18.92	O
ATOM	1643	CB	PHE	A	211	-7.543	-9.926	17.788	1.00	25.16	C
ATOM	1644	CG	PHE	A	211	-7.077	-8.695	17.057	1.00	26.16	C
ATOM	1645	CD1	PHE	A	211	-6.020	-7.951	17.542	1.00	25.15	C
ATOM	1646	CD2	PHE	A	211	-7.562	-8.404	15.786	1.00	25.67	C
ATOM	1647	CE1	PHE	A	211	-5.440	-6.965	16.771	1.00	23.64	C
ATOM	1648	CE2	PHE	A	211	-6.994	-7.414	15.017	1.00	23.27	C
ATOM	1649	CZ	PHE	A	211	-5.925	-6.698	15.511	1.00	25.63	C
ATOM	1650	N	LYS	A	212	-10.536	-10.244	18.363	1.00	20.64	N
ATOM	1651	CA	LYS	A	212	-11.955	-10.003	18.096	1.00	20.36	C
ATOM	1652	C	LYS	A	212	-12.497	-9.141	19.218	1.00	22.63	C
ATOM	1653	O	LYS	A	212	-12.772	-7.964	19.004	1.00	24.04	O
ATOM	1654	CB	LYS	A	212	-12.748	-11.308	18.044	1.00	19.99	C
ATOM	1655	CG	LYS	A	212	-13.261	-11.723	16.651	1.00	22.19	C
ATOM	1656	CD	LYS	A	212	-12.319	-12.755	15.969	1.00	17.63	C
ATOM	1657	CE	LYS	A	212	-13.061	-13.725	15.077	1.00	14.45	C
ATOM	1658	NZ	LYS	A	212	-14.268	-13.106	14.457	1.00	14.02	N1+
ATOM	1659	N	ALA	A	213	-12.384	-9.642	20.446	1.00	22.31	N
ATOM	1660	CA	ALA	A	213	-12.827	-8.900	21.614	1.00	21.34	C
ATOM	1661	C	ALA	A	213	-12.149	-7.537	21.705	1.00	21.10	C
ATOM	1662	O	ALA	A	213	-12.763	-6.552	22.098	1.00	23.45	O
ATOM	1663	CB	ALA	A	213	-12.569	-9.696	22.871	1.00	20.73	C
ATOM	1664	N	TRP	A	214	-10.922	-7.437	21.240	1.00	19.46	N
ATOM	1665	CA	TRP	A	214	-10.271	-6.142	21.224	1.00	19.15	C
ATOM	1666	C	TRP	A	214	-11.048	-5.224	20.314	1.00	18.85	C
ATOM	1667	O	TRP	A	214	-11.516	-4.175	20.734	1.00	20.49	O
ATOM	1668	CB	TRP	A	214	-8.870	-6.296	20.686	1.00	22.36	C
ATOM	1669	CG	TRP	A	214	-7.861	-5.482	21.350	1.00	24.56	C
ATOM	1670	CD1	TRP	A	214	-6.926	-5.942	22.246	1.00	26.33	C
ATOM	1671	CD2	TRP	A	214	-7.377	-4.211	20.888	1.00	25.12	C
ATOM	1672	CE2	TRP	A	214	-6.120	-4.005	21.484	1.00	28.85	C
ATOM	1673	CE3	TRP	A	214	-7.863	-3.267	19.975	1.00	21.79	C
ATOM	1674	NE1	TRP	A	214	-5.867	-5.073	22.305	1.00	31.06	N
ATOM	1675	CZ2	TRP	A	214	-5.341	-2.887	21.189	1.00	28.30	C
ATOM	1676	CZ3	TRP	A	214	-7.100	-2.178	19.689	1.00	18.16	C
ATOM	1677	CH2	TRP	A	214	-5.852	-1.991	20.287	1.00	25.36	C
ATOM	1678	N	ALA	A	215	-11.279	-5.677	19.092	1.00	18.46	N
ATOM	1679	CA	ALA	A	215	-11.815	-4.819	18.056	1.00	18.34	C
ATOM	1680	C	ALA	A	215	-13.346	-4.685	18.072	1.00	19.69	C
ATOM	1681	O	ALA	A	215	-13.853	-3.636	17.695	1.00	19.89	O
ATOM	1682	CB	ALA	A	215	-11.337	-5.295	16.705	1.00	17.27	C
ATOM	1683	N	VAL	A	216	-14.074	-5.711	18.532	1.00	19.07	N
ATOM	1684	CA	VAL	A	216	-15.533	-5.613	18.768	1.00	18.57	C
ATOM	1685	C	VAL	A	216	-15.801	-4.635	19.911	1.00	16.42	C
ATOM	1686	O	VAL	A	216	-16.854	-4.013	19.985	1.00	16.02	O
ATOM	1687	CB	VAL	A	216	-16.199	-6.979	19.159	1.00	18.60	C
ATOM	1688	CG1	VAL	A	216	-17.658	-6.980	18.765	1.00	18.91	C
ATOM	1689	CG2	VAL	A	216	-15.530	-8.129	18.488	1.00	18.58	C
ATOM	1690	N	ALA	A	217	-14.860	-4.555	20.837	1.00	15.89	N
ATOM	1691	CA	ALA	A	217	-14.811	-3.444	21.767	1.00	17.11	C
ATOM	1692	C	ALA	A	217	-14.553	-2.125	21.050	1.00	17.79	C
ATOM	1693	O	ALA	A	217	-15.155	-1.114	21.413	1.00	20.39	O
ATOM	1694	CB	ALA	A	217	-13.734	-3.679	22.827	1.00	17.06	C
ATOM	1695	N	ARG	A	218	-13.664	-2.114	20.050	1.00	16.98	N
ATOM	1696	CA	ARG	A	218	-13.190	-0.845	19.494	1.00	14.92	C
ATOM	1697	C	ARG	A	218	-13.902	-0.275	18.310	1.00	13.69	C
ATOM	1698	O	ARG	A	218	-14.093	0.920	18.241	1.00	17.63	O
ATOM	1699	CB	ARG	A	218	-11.717	-0.886	19.162	1.00	16.75	C
ATOM	1700	CG	ARG	A	218	-11.031	0.429	19.482	1.00	20.34	C
ATOM	1701	CD	ARG	A	218	-9.529	0.272	19.350	1.00	28.41	C

ATOM	1702	NE	ARG	A	218	-8.742	0.955	20.381	1.00	31.43	N
ATOM	1703	CZ	ARG	A	218	-7.410	0.999	20.357	1.00	31.18	C
ATOM	1704	NH1	ARG	A	218	-6.781	0.627	19.249	1.00	33.54	N1+
ATOM	1705	NH2	ARG	A	218	-6.709	1.463	21.392	1.00	28.29	N
ATOM	1706	N	LEU	A	219	-14.188	-1.074	17.304	1.00	13.67	N
ATOM	1707	CA	LEU	A	219	-14.863	-0.525	16.134	1.00	13.57	C
ATOM	1708	C	LEU	A	219	-16.279	-0.119	16.523	1.00	13.16	C
ATOM	1709	O	LEU	A	219	-16.875	0.721	15.861	1.00	11.91	O
ATOM	1710	CB	LEU	A	219	-14.861	-1.538	14.977	1.00	12.34	C
ATOM	1711	CG	LEU	A	219	-13.507	-2.219	14.718	1.00	11.08	C
ATOM	1712	CD1	LEU	A	219	-13.701	-3.486	13.935	1.00	12.13	C
ATOM	1713	CD2	LEU	A	219	-12.585	-1.277	13.980	1.00	10.31	C
ATOM	1714	N	SER	A	220	-16.711	-0.572	17.704	1.00	13.60	N
ATOM	1715	CA	SER	A	220	-18.039	-0.287	18.266	1.00	13.96	C
ATOM	1716	C	SER	A	220	-18.006	0.971	19.116	1.00	13.33	C
ATOM	1717	O	SER	A	220	-19.027	1.613	19.324	1.00	12.54	O
ATOM	1718	CB	SER	A	220	-18.527	-1.462	19.127	1.00	15.85	C
ATOM	1719	OG	SER	A	220	-19.168	-2.479	18.357	1.00	16.62	O
ATOM	1720	N	GLN	A	221	-16.798	1.360	19.507	1.00	15.03	N
ATOM	1721	CA	GLN	A	221	-16.498	2.618	20.203	1.00	14.21	C
ATOM	1722	C	GLN	A	221	-16.470	3.821	19.238	1.00	15.97	C
ATOM	1723	O	GLN	A	221	-16.314	4.959	19.669	1.00	17.34	O
ATOM	1724	CB	GLN	A	221	-15.127	2.473	20.843	1.00	13.10	C
ATOM	1725	CG	GLN	A	221	-14.878	3.266	22.062	1.00	20.06	C
ATOM	1726	CD	GLN	A	221	-14.119	2.455	23.085	1.00	24.79	C
ATOM	1727	NE2	GLN	A	221	-14.716	2.285	24.265	1.00	27.31	N
ATOM	1728	OE1	GLN	A	221	-13.066	1.884	22.784	1.00	24.46	O
ATOM	1729	N	ARG	A	222	-16.391	3.530	17.937	1.00	16.06	N
ATOM	1730	CA	ARG	A	222	-16.293	4.545	16.884	1.00	14.67	C
ATOM	1731	C	ARG	A	222	-17.453	4.450	15.874	1.00	14.79	C
ATOM	1732	O	ARG	A	222	-17.942	5.455	15.360	1.00	16.58	O
ATOM	1733	CB	ARG	A	222	-14.951	4.423	16.141	1.00	13.32	C
ATOM	1734	CG	ARG	A	222	-13.933	3.526	16.803	1.00	10.78	C
ATOM	1735	CD	ARG	A	222	-12.562	4.147	16.820	1.00	14.99	C
ATOM	1736	NE	ARG	A	222	-11.738	3.584	17.887	1.00	16.71	N
ATOM	1737	CZ	ARG	A	222	-10.937	4.294	18.683	1.00	17.32	C
ATOM	1738	NH1	ARG	A	222	-10.806	5.607	18.507	1.00	16.06	N1+
ATOM	1739	NH2	ARG	A	222	-10.252	3.687	19.654	1.00	12.90	N
ATOM	1740	N	PHE	A	223	-17.957	3.250	15.647	1.00	14.56	N
ATOM	1741	CA	PHE	A	223	-19.111	3.084	14.792	1.00	12.35	C
ATOM	1742	C	PHE	A	223	-20.298	2.602	15.626	1.00	13.17	C
ATOM	1743	O	PHE	A	223	-20.916	1.601	15.272	1.00	12.50	O
ATOM	1744	CB	PHE	A	223	-18.820	2.042	13.706	1.00	15.57	C
ATOM	1745	CG	PHE	A	223	-17.648	2.373	12.788	1.00	18.20	C
ATOM	1746	CD1	PHE	A	223	-16.762	3.398	13.060	1.00	18.12	C
ATOM	1747	CD2	PHE	A	223	-17.389	1.571	11.689	1.00	19.72	C
ATOM	1748	CE1	PHE	A	223	-15.642	3.594	12.261	1.00	20.71	C
ATOM	1749	CE2	PHE	A	223	-16.274	1.765	10.896	1.00	18.61	C
ATOM	1750	CZ	PHE	A	223	-15.401	2.767	11.182	1.00	18.31	C
ATOM	1751	N	PRO	A	224	-20.667	3.323	16.717	1.00	14.94	N
ATOM	1752	CA	PRO	A	224	-21.635	2.860	17.714	1.00	14.17	C
ATOM	1753	C	PRO	A	224	-23.096	2.979	17.275	1.00	15.44	C
ATOM	1754	O	PRO	A	224	-23.942	3.488	18.004	1.00	16.00	O
ATOM	1755	CB	PRO	A	224	-21.344	3.757	18.900	1.00	13.07	C
ATOM	1756	CG	PRO	A	224	-21.074	5.010	18.284	1.00	14.26	C
ATOM	1757	CD	PRO	A	224	-20.226	4.679	17.073	1.00	17.21	C
ATOM	1758	N	LYS	A	225	-23.347	2.630	16.026	1.00	15.99	N
ATOM	1759	CA	LYS	A	225	-24.668	2.300	15.555	1.00	15.34	C
ATOM	1760	C	LYS	A	225	-24.515	1.109	14.603	1.00	20.08	C
ATOM	1761	O	LYS	A	225	-25.481	0.396	14.332	1.00	23.63	O
ATOM	1762	CB	LYS	A	225	-25.285	3.490	14.839	1.00	10.48	C
ATOM	1763	CG	LYS	A	225	-24.358	4.174	13.887	1.00	10.33	C
ATOM	1764	CD	LYS	A	225	-24.354	5.652	14.130	1.00	9.50	C
ATOM	1765	CE	LYS	A	225	-25.685	6.266	13.772	1.00	11.24	C
ATOM	1766	NZ	LYS	A	225	-25.779	7.709	14.196	1.00	13.92	N1+
ATOM	1767	N	ALA	A	226	-23.282	0.839	14.171	1.00	21.60	N
ATOM	1768	CA	ALA	A	226	-22.963	-0.387	13.446	1.00	22.74	C
ATOM	1769	C	ALA	A	226	-23.686	-1.533	14.133	1.00	23.96	C
ATOM	1770	O	ALA	A	226	-23.520	-1.710	15.331	1.00	28.06	O
ATOM	1771	CB	ALA	A	226	-21.474	-0.630	13.497	1.00	21.05	C
ATOM	1772	N	GLU	A	227	-24.595	-2.212	13.446	1.00	23.06	N

ATOM	1773	CA	GLU	A	227	-25.267	-3.340	14.079	1.00	20.89	C
ATOM	1774	C	GLU	A	227	-24.243	-4.476	14.307	1.00	18.38	C
ATOM	1775	O	GLU	A	227	-23.142	-4.455	13.748	1.00	11.59	O
ATOM	1776	CB	GLU	A	227	-26.507	-3.810	13.258	1.00	22.63	C
ATOM	1777	CG	GLU	A	227	-27.720	-2.794	13.205	1.00	26.40	C
ATOM	1778	CD	GLU	A	227	-28.944	-3.104	14.146	1.00	29.49	C
ATOM	1779	OE1	GLU	A	227	-28.945	-4.106	14.913	1.00	29.48	O
ATOM	1780	OE2	GLU	A	227	-29.925	-2.315	14.120	1.00	26.69	O1-
ATOM	1781	N	PHE	A	228	-24.524	-5.295	15.321	1.00	19.59	N
ATOM	1782	CA	PHE	A	228	-23.714	-6.468	15.669	1.00	21.16	C
ATOM	1783	C	PHE	A	228	-23.418	-7.380	14.467	1.00	22.82	C
ATOM	1784	O	PHE	A	228	-22.343	-8.002	14.393	1.00	22.75	O
ATOM	1785	CB	PHE	A	228	-24.392	-7.285	16.798	1.00	19.31	C
ATOM	1786	CG	PHE	A	228	-23.470	-8.270	17.481	1.00	15.55	C
ATOM	1787	CD1	PHE	A	228	-22.401	-7.826	18.231	1.00	11.82	C
ATOM	1788	CD2	PHE	A	228	-23.598	-9.636	17.254	1.00	13.74	C
ATOM	1789	CE1	PHE	A	228	-21.482	-8.709	18.727	1.00	11.35	C
ATOM	1790	CE2	PHE	A	228	-22.675	-10.526	17.751	1.00	10.57	C
ATOM	1791	CZ	PHE	A	228	-21.620	-10.067	18.485	1.00	10.53	C
ATOM	1792	N	ALA	A	229	-24.362	-7.472	13.532	1.00	22.31	N
ATOM	1793	CA	ALA	A	229	-24.033	-7.999	12.215	1.00	21.94	C
ATOM	1794	C	ALA	A	229	-22.699	-7.383	11.737	1.00	22.28	C
ATOM	1795	O	ALA	A	229	-21.645	-7.988	11.955	1.00	22.58	O
ATOM	1796	CB	ALA	A	229	-25.157	-7.698	11.238	1.00	18.80	C
ATOM	1797	N	GLU	A	230	-22.718	-6.071	11.494	1.00	23.17	N
ATOM	1798	CA	GLU	A	230	-21.634	-5.373	10.779	1.00	22.57	C
ATOM	1799	C	GLU	A	230	-20.289	-5.093	11.487	1.00	21.60	C
ATOM	1800	O	GLU	A	230	-19.291	-4.855	10.813	1.00	20.95	O
ATOM	1801	CB	GLU	A	230	-22.147	-4.061	10.165	1.00	19.48	C
ATOM	1802	CG	GLU	A	230	-21.896	-3.975	8.671	1.00	17.15	C
ATOM	1803	CD	GLU	A	230	-22.865	-4.813	7.850	1.00	17.55	C
ATOM	1804	OE1	GLU	A	230	-23.995	-4.329	7.598	1.00	17.87	O
ATOM	1805	OE2	GLU	A	230	-22.488	-5.926	7.409	1.00	15.08	O1-
ATOM	1806	N	VAL	A	231	-20.231	-5.073	12.814	1.00	20.69	N
ATOM	1807	CA	VAL	A	231	-18.917	-5.007	13.435	1.00	16.38	C
ATOM	1808	C	VAL	A	231	-18.287	-6.364	13.136	1.00	20.32	C
ATOM	1809	O	VAL	A	231	-17.101	-6.442	12.828	1.00	21.55	O
ATOM	1810	CB	VAL	A	231	-18.978	-4.758	14.964	1.00	12.08	C
ATOM	1811	CG1	VAL	A	231	-17.812	-5.401	15.645	1.00	11.97	C
ATOM	1812	CG2	VAL	A	231	-18.937	-3.285	15.262	1.00	11.69	C
ATOM	1813	N	SER	A	232	-19.108	-7.408	13.049	1.00	22.30	N
ATOM	1814	CA	SER	A	232	-18.566	-8.749	12.844	1.00	25.21	C
ATOM	1815	C	SER	A	232	-18.383	-9.125	11.373	1.00	26.83	C
ATOM	1816	O	SER	A	232	-18.337	-10.306	11.009	1.00	28.08	O
ATOM	1817	CB	SER	A	232	-19.408	-9.788	13.586	1.00	25.39	C
ATOM	1818	OG	SER	A	232	-18.793	-10.070	14.841	1.00	28.11	O
ATOM	1819	N	LYS	A	233	-18.260	-8.096	10.536	1.00	26.97	N
ATOM	1820	CA	LYS	A	233	-17.661	-8.228	9.225	1.00	23.19	C
ATOM	1821	C	LYS	A	233	-16.769	-7.018	9.066	1.00	20.48	C
ATOM	1822	O	LYS	A	233	-16.735	-6.421	8.012	1.00	21.98	O
ATOM	1823	CB	LYS	A	233	-18.733	-8.254	8.133	1.00	25.56	C
ATOM	1824	CG	LYS	A	233	-18.198	-8.687	6.754	1.00	29.24	C
ATOM	1825	CD	LYS	A	233	-19.299	-9.170	5.786	1.00	28.84	C
ATOM	1826	CE	LYS	A	233	-18.745	-10.207	4.785	1.00	29.50	C
ATOM	1827	NZ	LYS	A	233	-19.637	-10.474	3.618	1.00	28.23	N1+
ATOM	1828	N	LEU	A	234	-16.191	-6.564	10.174	1.00	19.32	N
ATOM	1829	CA	LEU	A	234	-15.119	-5.570	10.155	1.00	19.26	C
ATOM	1830	C	LEU	A	234	-13.971	-6.022	11.075	1.00	20.45	C
ATOM	1831	O	LEU	A	234	-12.798	-5.927	10.710	1.00	20.91	O
ATOM	1832	CB	LEU	A	234	-15.623	-4.191	10.598	1.00	18.55	C
ATOM	1833	CG	LEU	A	234	-16.945	-3.619	10.054	1.00	20.65	C
ATOM	1834	CD1	LEU	A	234	-17.229	-2.274	10.718	1.00	20.73	C
ATOM	1835	CD2	LEU	A	234	-16.900	-3.452	8.536	1.00	18.64	C
ATOM	1836	N	VAL	A	235	-14.308	-6.626	12.214	1.00	19.59	N
ATOM	1837	CA	VAL	A	235	-13.301	-7.227	13.089	1.00	16.45	C
ATOM	1838	C	VAL	A	235	-12.927	-8.677	12.704	1.00	16.23	C
ATOM	1839	O	VAL	A	235	-11.848	-9.153	13.054	1.00	17.61	O
ATOM	1840	CB	VAL	A	235	-13.756	-7.164	14.556	1.00	14.01	C
ATOM	1841	CG1	VAL	A	235	-15.208	-7.513	14.660	1.00	14.30	C
ATOM	1842	CG2	VAL	A	235	-12.943	-8.102	15.421	1.00	14.29	C
ATOM	1843	N	THR	A	236	-13.808	-9.361	11.976	1.00	13.39	N

ATOM	1844	CA	THR	A	236	-13.512	-10.659	11.367	1.00	10.14	C
ATOM	1845	C	THR	A	236	-12.673	-10.444	10.102	1.00	12.00	C
ATOM	1846	O	THR	A	236	-11.962	-11.342	9.665	1.00	10.48	O
ATOM	1847	CB	THR	A	236	-14.803	-11.359	10.949	1.00	9.09	C
ATOM	1848	CG2	THR	A	236	-14.960	-12.671	11.657	1.00	10.99	C
ATOM	1849	OG1	THR	A	236	-15.914	-10.525	11.281	1.00	5.10	O
ATOM	1850	N	ASP	A	237	-12.708	-9.207	9.592	1.00	13.66	N
ATOM	1851	CA	ASP	A	237	-12.113	-8.807	8.320	1.00	12.69	C
ATOM	1852	C	ASP	A	237	-10.804	-8.086	8.567	1.00	16.23	C
ATOM	1853	O	ASP	A	237	-10.160	-7.609	7.622	1.00	17.55	O
ATOM	1854	CB	ASP	A	237	-13.052	-7.857	7.581	1.00	9.81	C
ATOM	1855	CG	ASP	A	237	-14.195	-8.580	6.879	1.00	15.79	C
ATOM	1856	OD1	ASP	A	237	-14.151	-9.824	6.788	1.00	20.11	O
ATOM	1857	OD2	ASP	A	237	-15.114	-7.914	6.350	1.00	14.61	O1-
ATOM	1858	N	LEU	A	238	-10.504	-7.875	9.849	1.00	17.84	N
ATOM	1859	CA	LEU	A	238	-9.376	-7.046	10.284	1.00	17.70	C
ATOM	1860	C	LEU	A	238	-8.366	-7.946	10.952	1.00	17.11	C
ATOM	1861	O	LEU	A	238	-7.171	-7.656	10.954	1.00	18.24	O
ATOM	1862	CB	LEU	A	238	-9.830	-6.016	11.310	1.00	18.48	C
ATOM	1863	CG	LEU	A	238	-9.252	-4.614	11.261	1.00	15.02	C
ATOM	1864	CD1	LEU	A	238	-10.258	-3.748	10.568	1.00	13.60	C
ATOM	1865	CD2	LEU	A	238	-8.989	-4.102	12.650	1.00	11.12	C
ATOM	1866	N	THR	A	239	-8.868	-8.928	11.684	1.00	15.12	N
ATOM	1867	CA	THR	A	239	-8.031	-10.025	12.104	1.00	15.74	C
ATOM	1868	C	THR	A	239	-7.229	-10.453	10.851	1.00	16.69	C
ATOM	1869	O	THR	A	239	-6.120	-9.942	10.661	1.00	18.36	O
ATOM	1870	CB	THR	A	239	-8.899	-11.180	12.745	1.00	15.86	C
ATOM	1871	CG2	THR	A	239	-8.061	-12.423	13.008	1.00	12.44	C
ATOM	1872	OG1	THR	A	239	-9.476	-10.724	13.988	1.00	7.33	O
ATOM	1873	N	LYS	A	240	-7.899	-11.064	9.873	1.00	15.75	N
ATOM	1874	CA	LYS	A	240	-7.262	-11.521	8.617	1.00	14.50	C
ATOM	1875	C	LYS	A	240	-6.100	-10.649	8.114	1.00	12.60	C
ATOM	1876	O	LYS	A	240	-5.042	-11.164	7.764	1.00	12.12	O
ATOM	1877	CB	LYS	A	240	-8.314	-11.608	7.513	1.00	13.34	C
ATOM	1878	CG	LYS	A	240	-8.390	-12.935	6.845	1.00	16.59	C
ATOM	1879	CD	LYS	A	240	-9.351	-12.874	5.664	1.00	23.14	C
ATOM	1880	CE	LYS	A	240	-8.943	-13.846	4.544	1.00	26.65	C
ATOM	1881	NZ	LYS	A	240	-7.629	-13.487	3.874	1.00	31.21	N1+
ATOM	1882	N	VAL	A	241	-6.361	-9.349	7.966	1.00	12.72	N
ATOM	1883	CA	VAL	A	241	-5.359	-8.348	7.614	1.00	9.66	C
ATOM	1884	C	VAL	A	241	-4.266	-8.481	8.636	1.00	11.94	C
ATOM	1885	O	VAL	A	241	-3.289	-9.155	8.386	1.00	14.55	O
ATOM	1886	CB	VAL	A	241	-5.909	-6.900	7.705	1.00	8.96	C
ATOM	1887	CG1	VAL	A	241	-4.808	-5.903	7.469	1.00	6.95	C
ATOM	1888	CG2	VAL	A	241	-7.030	-6.681	6.719	1.00	7.52	C
ATOM	1889	N	HIS	A	242	-4.541	-8.050	9.858	1.00	11.85	N
ATOM	1890	CA	HIS	A	242	-3.490	-7.939	10.863	1.00	17.50	C
ATOM	1891	C	HIS	A	242	-2.715	-9.236	11.110	1.00	19.56	C
ATOM	1892	O	HIS	A	242	-1.490	-9.212	11.321	1.00	19.10	O
ATOM	1893	CB	HIS	A	242	-4.071	-7.433	12.179	1.00	19.40	C
ATOM	1894	CG	HIS	A	242	-4.033	-5.949	12.311	1.00	17.51	C
ATOM	1895	CD2	HIS	A	242	-3.023	-5.113	12.638	1.00	17.18	C
ATOM	1896	ND1	HIS	A	242	-5.063	-5.146	11.870	1.00	14.59	N
ATOM	1897	CE1	HIS	A	242	-4.680	-3.885	11.896	1.00	14.07	C
ATOM	1898	NE2	HIS	A	242	-3.445	-3.842	12.360	1.00	20.83	N
ATOM	1899	N	THR	A	243	-3.419	-10.364	11.043	1.00	20.29	N
ATOM	1900	CA	THR	A	243	-2.791	-11.653	11.247	1.00	21.66	C
ATOM	1901	C	THR	A	243	-1.638	-11.802	10.259	1.00	22.36	C
ATOM	1902	O	THR	A	243	-0.494	-11.979	10.667	1.00	20.98	O
ATOM	1903	CB	THR	A	243	-3.803	-12.808	11.058	1.00	22.04	C
ATOM	1904	CG2	THR	A	243	-4.560	-13.061	12.338	1.00	19.78	C
ATOM	1905	OG1	THR	A	243	-4.743	-12.465	10.030	1.00	22.04	O
ATOM	1906	N	GLU	A	244	-1.923	-11.503	8.994	1.00	24.92	N
ATOM	1907	CA	GLU	A	244	-0.963	-11.634	7.884	1.00	24.81	C
ATOM	1908	C	GLU	A	244	0.269	-10.751	8.073	1.00	24.55	C
ATOM	1909	O	GLU	A	244	1.365	-11.289	8.316	1.00	25.76	O
ATOM	1910	CB	GLU	A	244	-1.654	-11.320	6.540	1.00	21.04	C
ATOM	1911	CG	GLU	A	244	-2.417	-12.526	5.981	1.00	20.42	C
ATOM	1912	CD	GLU	A	244	-3.749	-12.186	5.369	1.00	16.71	C
ATOM	1913	OE1	GLU	A	244	-3.861	-11.097	4.794	1.00	19.88	O
ATOM	1914	OE2	GLU	A	244	-4.670	-13.029	5.410	1.00	15.80	O1-

ATOM	1915	N	CYS	A	245	0.061	-9.426	8.150	1.00	23.02	N
ATOM	1916	CA	CYS	A	245	1.148	-8.466	8.429	1.00	21.48	C
ATOM	1917	C	CYS	A	245	1.936	-8.829	9.702	1.00	21.49	C
ATOM	1918	O	CYS	A	245	2.965	-8.215	10.000	1.00	20.53	O
ATOM	1919	CB	CYS	A	245	0.604	-7.039	8.577	1.00	20.81	C
ATOM	1920	SG	CYS	A	245	0.340	-6.068	7.058	1.00	19.72	S
ATOM	1921	N	CYS	A	246	1.434	-9.803	10.458	1.00	20.66	N
ATOM	1922	CA	CYS	A	246	2.133	-10.288	11.635	1.00	22.93	C
ATOM	1923	C	CYS	A	246	2.810	-11.634	11.342	1.00	23.54	C
ATOM	1924	O	CYS	A	246	4.001	-11.829	11.613	1.00	23.49	O
ATOM	1925	CB	CYS	A	246	1.150	-10.431	12.828	1.00	23.38	C
ATOM	1926	SG	CYS	A	246	0.340	-8.909	13.476	1.00	21.26	S
ATOM	1927	N	HIS	A	247	2.054	-12.531	10.717	1.00	26.98	N
ATOM	1928	CA	HIS	A	247	2.461	-13.924	10.463	1.00	28.41	C
ATOM	1929	C	HIS	A	247	3.551	-14.018	9.371	1.00	27.16	C
ATOM	1930	O	HIS	A	247	3.999	-15.107	8.996	1.00	24.90	O
ATOM	1931	CB	HIS	A	247	1.221	-14.734	10.034	1.00	30.64	C
ATOM	1932	CG	HIS	A	247	0.887	-15.871	10.953	1.00	33.09	C
ATOM	1933	CD2	HIS	A	247	1.675	-16.666	11.718	1.00	31.19	C
ATOM	1934	ND1	HIS	A	247	-0.397	-16.372	11.077	1.00	32.64	N
ATOM	1935	CE1	HIS	A	247	-0.383	-17.423	11.881	1.00	32.18	C
ATOM	1936	NE2	HIS	A	247	0.859	-17.616	12.285	1.00	34.75	N
ATOM	1937	N	GLY	A	248	3.882	-12.875	8.788	1.00	26.19	N
ATOM	1938	CA	GLY	A	248	5.010	-12.822	7.893	1.00	24.62	C
ATOM	1939	C	GLY	A	248	4.560	-12.235	6.584	1.00	24.54	C
ATOM	1940	O	GLY	A	248	5.066	-11.200	6.176	1.00	25.55	O
ATOM	1941	N	ASP	A	249	3.553	-12.847	5.966	1.00	23.88	N
ATOM	1942	CA	ASP	A	249	3.154	-12.470	4.619	1.00	20.47	C
ATOM	1943	C	ASP	A	249	2.317	-11.215	4.621	1.00	20.76	C
ATOM	1944	O	ASP	A	249	1.132	-11.257	4.957	1.00	21.26	O
ATOM	1945	CB	ASP	A	249	2.408	-13.612	3.903	1.00	20.40	C
ATOM	1946	CG	ASP	A	249	1.351	-14.282	4.764	1.00	18.24	C
ATOM	1947	OD1	ASP	A	249	1.703	-15.199	5.537	1.00	19.57	O
ATOM	1948	OD2	ASP	A	249	0.152	-14.040	4.523	1.00	17.76	O1-
ATOM	1949	N	LEU	A	250	3.003	-10.087	4.423	1.00	20.08	N
ATOM	1950	CA	LEU	A	250	2.373	-8.789	4.180	1.00	20.75	C
ATOM	1951	C	LEU	A	250	1.422	-8.841	2.956	1.00	23.97	C
ATOM	1952	O	LEU	A	250	0.246	-9.180	3.084	1.00	24.23	O
ATOM	1953	CB	LEU	A	250	3.427	-7.715	3.892	1.00	18.42	C
ATOM	1954	CG	LEU	A	250	4.765	-7.394	4.537	1.00	17.52	C
ATOM	1955	CD1	LEU	A	250	5.333	-8.472	5.381	1.00	20.69	C
ATOM	1956	CD2	LEU	A	250	5.689	-7.106	3.393	1.00	20.41	C
ATOM	1957	N	LEU	A	251	1.964	-8.473	1.788	1.00	24.70	N
ATOM	1958	CA	LEU	A	251	1.273	-8.329	0.499	1.00	21.99	C
ATOM	1959	C	LEU	A	251	-0.227	-8.608	0.403	1.00	22.01	C
ATOM	1960	O	LEU	A	251	-0.983	-7.834	-0.179	1.00	19.96	O
ATOM	1961	CB	LEU	A	251	2.016	-9.161	-0.540	1.00	22.73	C
ATOM	1962	CG	LEU	A	251	3.503	-8.825	-0.674	1.00	21.62	C
ATOM	1963	CD1	LEU	A	251	4.302	-9.609	0.354	1.00	22.59	C
ATOM	1964	CD2	LEU	A	251	3.972	-9.145	-2.085	1.00	20.79	C
ATOM	1965	N	GLU	A	252	-0.633	-9.779	0.856	1.00	23.52	N
ATOM	1966	CA	GLU	A	252	-2.053	-10.078	0.994	1.00	24.95	C
ATOM	1967	C	GLU	A	252	-2.699	-8.956	1.840	1.00	25.20	C
ATOM	1968	O	GLU	A	252	-3.583	-8.247	1.364	1.00	26.85	O
ATOM	1969	CB	GLU	A	252	-2.225	-11.463	1.648	1.00	23.50	C
ATOM	1970	CG	GLU	A	252	-1.702	-12.659	0.793	1.00	23.59	C
ATOM	1971	CD	GLU	A	252	-0.211	-12.968	0.966	1.00	22.46	C
ATOM	1972	OE1	GLU	A	252	0.548	-12.064	1.372	1.00	21.42	O
ATOM	1973	OE2	GLU	A	252	0.212	-14.112	0.667	1.00	20.54	O1-
ATOM	1974	N	CYS	A	253	-2.113	-8.683	3.002	1.00	23.06	N
ATOM	1975	CA	CYS	A	253	-2.418	-7.509	3.825	1.00	21.89	C
ATOM	1976	C	CYS	A	253	-2.879	-6.277	3.017	1.00	22.51	C
ATOM	1977	O	CYS	A	253	-4.077	-5.982	2.928	1.00	18.60	O
ATOM	1978	CB	CYS	A	253	-1.171	-7.153	4.662	1.00	20.32	C
ATOM	1979	SG	CYS	A	253	-1.466	-6.653	6.385	1.00	15.33	S
ATOM	1980	N	ALA	A	254	-1.921	-5.638	2.345	1.00	22.49	N
ATOM	1981	CA	ALA	A	254	-2.105	-4.310	1.755	1.00	22.36	C
ATOM	1982	C	ALA	A	254	-3.233	-4.310	0.727	1.00	22.41	C
ATOM	1983	O	ALA	A	254	-3.812	-3.264	0.430	1.00	20.73	O
ATOM	1984	CB	ALA	A	254	-0.785	-3.836	1.104	1.00	20.82	C
ATOM	1985	N	ASP	A	255	-3.433	-5.475	0.108	1.00	23.61	N

ATOM	1986	CA	ASP	A	255	-4.448	-5.684	-0.918	1.00	23.62	C
ATOM	1987	C	ASP	A	255	-5.725	-5.744	-0.112	1.00	24.73	C
ATOM	1988	O	ASP	A	255	-6.638	-4.941	-0.353	1.00	25.80	O
ATOM	1989	CB	ASP	A	255	-4.205	-7.026	-1.648	1.00	24.09	C
ATOM	1990	CG	ASP	A	255	-5.128	-7.234	-2.858	1.00	26.69	C
ATOM	1991	OD1	ASP	A	255	-5.894	-6.309	-3.200	1.00	28.50	O
ATOM	1992	OD2	ASP	A	255	-5.063	-8.310	-3.507	1.00	25.31	O1-
ATOM	1993	N	ASP	A	256	-5.645	-6.478	1.009	1.00	24.05	N
ATOM	1994	CA	ASP	A	256	-6.778	-6.758	1.893	1.00	21.53	C
ATOM	1995	C	ASP	A	256	-7.408	-5.507	2.499	1.00	22.11	C
ATOM	1996	O	ASP	A	256	-8.603	-5.319	2.331	1.00	21.08	O
ATOM	1997	CB	ASP	A	256	-6.375	-7.720	3.009	1.00	19.32	C
ATOM	1998	CG	ASP	A	256	-6.474	-9.182	2.594	1.00	21.17	C
ATOM	1999	OD1	ASP	A	256	-7.390	-9.548	1.814	1.00	17.48	O
ATOM	2000	OD2	ASP	A	256	-5.650	-9.984	3.094	1.00	19.56	O1-
ATOM	2001	N	ARG	A	257	-6.624	-4.584	3.069	1.00	22.19	N
ATOM	2002	CA	ARG	A	257	-7.214	-3.327	3.566	1.00	22.80	C
ATOM	2003	C	ARG	A	257	-7.861	-2.446	2.497	1.00	23.33	C
ATOM	2004	O	ARG	A	257	-8.179	-1.277	2.756	1.00	24.22	O
ATOM	2005	CB	ARG	A	257	-6.212	-2.474	4.344	1.00	23.48	C
ATOM	2006	CG	ARG	A	257	-6.912	-1.398	5.220	1.00	26.53	C
ATOM	2007	CD	ARG	A	257	-6.367	-1.389	6.660	1.00	32.02	C
ATOM	2008	NE	ARG	A	257	-7.343	-1.126	7.730	1.00	29.83	N
ATOM	2009	CZ	ARG	A	257	-6.970	-0.900	8.990	1.00	29.33	C
ATOM	2010	NH1	ARG	A	257	-5.677	-0.815	9.258	1.00	31.19	N1+
ATOM	2011	NH2	ARG	A	257	-7.857	-0.700	9.970	1.00	27.88	N
ATOM	2012	N	ALA	A	258	-8.016	-2.989	1.288	1.00	23.60	N
ATOM	2013	CA	ALA	A	258	-8.843	-2.381	0.247	1.00	19.06	C
ATOM	2014	C	ALA	A	258	-9.853	-3.397	-0.273	1.00	17.21	C
ATOM	2015	O	ALA	A	258	-11.020	-3.095	-0.345	1.00	16.88	O
ATOM	2016	CB	ALA	A	258	-7.989	-1.870	-0.849	1.00	17.23	C
ATOM	2017	N	ASP	A	259	-9.464	-4.662	-0.292	1.00	18.75	N
ATOM	2018	CA	ASP	A	259	-10.430	-5.768	-0.205	1.00	21.08	C
ATOM	2019	C	ASP	A	259	-11.253	-5.577	1.090	1.00	19.96	C
ATOM	2020	O	ASP	A	259	-12.159	-6.365	1.380	1.00	20.42	O
ATOM	2021	CB	ASP	A	259	-9.690	-7.150	-0.180	1.00	24.22	C
ATOM	2022	CG	ASP	A	259	-10.169	-8.150	-1.288	1.00	21.26	C
ATOM	2023	OD1	ASP	A	259	-11.075	-7.821	-2.076	1.00	21.43	O
ATOM	2024	OD2	ASP	A	259	-9.634	-9.279	-1.364	1.00	17.32	O1-
ATOM	2025	N	LEU	A	260	-10.848	-4.617	1.924	1.00	18.38	N
ATOM	2026	CA	LEU	A	260	-11.732	-4.087	2.948	1.00	19.05	C
ATOM	2027	C	LEU	A	260	-12.198	-2.692	2.561	1.00	20.78	C
ATOM	2028	O	LEU	A	260	-13.257	-2.581	1.950	1.00	22.27	O
ATOM	2029	CB	LEU	A	260	-11.087	-4.076	4.334	1.00	18.98	C
ATOM	2030	CG	LEU	A	260	-11.986	-4.337	5.564	1.00	15.64	C
ATOM	2031	CD1	LEU	A	260	-11.913	-3.163	6.525	1.00	14.71	C
ATOM	2032	CD2	LEU	A	260	-13.418	-4.561	5.153	1.00	12.68	C
ATOM	2033	N	ALA	A	261	-11.398	-1.651	2.801	1.00	19.14	N
ATOM	2034	CA	ALA	A	261	-11.884	-0.274	2.617	1.00	20.29	C
ATOM	2035	C	ALA	A	261	-12.836	-0.069	1.445	1.00	20.76	C
ATOM	2036	O	ALA	A	261	-13.748	0.727	1.551	1.00	23.76	O
ATOM	2037	CB	ALA	A	261	-10.738	0.703	2.506	1.00	20.41	C
ATOM	2038	N	LYS	A	262	-12.715	-0.870	0.390	1.00	21.67	N
ATOM	2039	CA	LYS	A	262	-13.724	-0.914	-0.678	1.00	22.13	C
ATOM	2040	C	LYS	A	262	-14.858	-1.897	-0.338	1.00	22.91	C
ATOM	2041	O	LYS	A	262	-15.231	-2.735	-1.178	1.00	24.14	O
ATOM	2042	CB	LYS	A	262	-13.079	-1.319	-2.018	1.00	21.14	C
ATOM	2043	CG	LYS	A	262	-12.745	-0.182	-2.958	1.00	20.45	C
ATOM	2044	CD	LYS	A	262	-13.871	0.032	-3.965	1.00	22.63	C
ATOM	2045	CE	LYS	A	262	-13.416	0.915	-5.138	1.00	22.50	C
ATOM	2046	NZ	LYS	A	262	-13.721	0.318	-6.475	1.00	18.96	N1+
ATOM	2047	N	TYR	A	263	-15.279	-1.881	0.933	1.00	20.93	N
ATOM	2048	CA	TYR	A	263	-16.547	-2.447	1.416	1.00	15.95	C
ATOM	2049	C	TYR	A	263	-17.010	-1.449	2.439	1.00	14.10	C
ATOM	2050	O	TYR	A	263	-17.949	-0.720	2.178	1.00	16.17	O
ATOM	2051	CB	TYR	A	263	-16.349	-3.803	2.096	1.00	16.93	C
ATOM	2052	CG	TYR	A	263	-17.327	-4.107	3.212	1.00	14.41	C
ATOM	2053	CD1	TYR	A	263	-18.595	-4.556	2.931	1.00	17.78	C
ATOM	2054	CD2	TYR	A	263	-17.055	-3.743	4.505	1.00	15.15	C
ATOM	2055	CE1	TYR	A	263	-19.577	-4.581	3.889	1.00	17.72	C
ATOM	2056	CE2	TYR	A	263	-18.025	-3.763	5.472	1.00	16.35	C

ATOM	2057	CZ	TYR	A	263	-19.294	-4.157	5.153	1.00	17.14	C
ATOM	2058	OH	TYR	A	263	-20.326	-3.914	6.025	1.00	18.82	O
ATOM	2059	N	ILE	A	264	-16.205	-1.275	3.488	1.00	13.60	N
ATOM	2060	CA	ILE	A	264	-16.396	-0.224	4.502	1.00	13.72	C
ATOM	2061	C	ILE	A	264	-16.916	0.992	3.801	1.00	14.67	C
ATOM	2062	O	ILE	A	264	-18.082	1.333	3.943	1.00	16.24	O
ATOM	2063	CB	ILE	A	264	-15.058	0.192	5.230	1.00	11.33	C
ATOM	2064	CG1	ILE	A	264	-14.910	-0.527	6.568	1.00	9.86	C
ATOM	2065	CG2	ILE	A	264	-15.057	1.676	5.551	1.00	12.03	C
ATOM	2066	CD1	ILE	A	264	-13.924	0.134	7.518	1.00	8.24	C
ATOM	2067	N	CYS	A	265	-16.146	1.431	2.817	1.00	18.20	N
ATOM	2068	CA	CYS	A	265	-16.409	2.706	2.184	1.00	21.00	C
ATOM	2069	C	CYS	A	265	-17.183	2.683	0.863	1.00	20.34	C
ATOM	2070	O	CYS	A	265	-17.164	3.648	0.104	1.00	18.15	O
ATOM	2071	CB	CYS	A	265	-15.131	3.508	2.016	1.00	18.44	C
ATOM	2072	SG	CYS	A	265	-15.717	5.147	1.584	1.00	24.42	S
ATOM	2073	N	GLU	A	266	-17.927	1.612	0.630	1.00	22.55	N
ATOM	2074	CA	GLU	A	266	-19.044	1.668	-0.305	1.00	25.71	C
ATOM	2075	C	GLU	A	266	-20.359	1.649	0.507	1.00	25.99	C
ATOM	2076	O	GLU	A	266	-21.401	2.132	0.031	1.00	24.57	O
ATOM	2077	CB	GLU	A	266	-18.982	0.486	-1.306	1.00	30.26	C
ATOM	2078	CG	GLU	A	266	-18.126	0.746	-2.589	1.00	33.40	C
ATOM	2079	CD	GLU	A	266	-18.430	-0.224	-3.755	1.00	33.38	C
ATOM	2080	OE1	GLU	A	266	-19.340	0.064	-4.569	1.00	34.65	O
ATOM	2081	OE2	GLU	A	266	-17.702	-1.226	-3.918	1.00	31.65	O1-
ATOM	2082	N	ASN	A	267	-20.231	1.304	1.792	1.00	24.11	N
ATOM	2083	CA	ASN	A	267	-21.367	1.133	2.693	1.00	24.75	C
ATOM	2084	C	ASN	A	267	-21.562	2.304	3.675	1.00	25.96	C
ATOM	2085	O	ASN	A	267	-22.551	2.367	4.425	1.00	24.17	O
ATOM	2086	CB	ASN	A	267	-21.201	-0.171	3.465	1.00	25.26	C
ATOM	2087	CG	ASN	A	267	-21.552	-1.388	2.630	1.00	26.30	C
ATOM	2088	ND2	ASN	A	267	-21.767	-2.527	3.293	1.00	23.38	N
ATOM	2089	OD1	ASN	A	267	-21.602	-1.314	1.394	1.00	28.38	O
ATOM	2090	N	GLN	A	268	-20.543	3.150	3.756	1.00	27.51	N
ATOM	2091	CA	GLN	A	268	-20.619	4.455	4.422	1.00	26.43	C
ATOM	2092	C	GLN	A	268	-21.731	4.680	5.469	1.00	25.52	C
ATOM	2093	O	GLN	A	268	-21.432	5.026	6.604	1.00	23.74	O
ATOM	2094	CB	GLN	A	268	-20.693	5.552	3.354	1.00	24.02	C
ATOM	2095	CG	GLN	A	268	-19.418	6.340	3.149	1.00	20.44	C
ATOM	2096	CD	GLN	A	268	-19.711	7.673	2.493	1.00	23.29	C
ATOM	2097	NE2	GLN	A	268	-18.762	8.607	2.568	1.00	22.63	N
ATOM	2098	OE1	GLN	A	268	-20.807	7.873	1.949	1.00	24.24	O
ATOM	2099	N	ASP	A	269	-22.993	4.648	5.054	1.00	25.35	N
ATOM	2100	CA	ASP	A	269	-24.064	5.203	5.882	1.00	26.24	C
ATOM	2101	C	ASP	A	269	-24.667	4.170	6.833	1.00	28.27	C
ATOM	2102	O	ASP	A	269	-25.243	4.533	7.873	1.00	29.26	O
ATOM	2103	CB	ASP	A	269	-25.180	5.803	5.009	1.00	27.91	C
ATOM	2104	CG	ASP	A	269	-25.889	4.753	4.153	1.00	29.64	C
ATOM	2105	OD1	ASP	A	269	-25.178	3.900	3.565	1.00	30.12	O
ATOM	2106	OD2	ASP	A	269	-27.151	4.754	4.103	1.00	29.00	O1-
ATOM	2107	N	SER	A	270	-24.536	2.886	6.501	1.00	27.48	N
ATOM	2108	CA	SER	A	270	-24.993	1.847	7.413	1.00	26.75	C
ATOM	2109	C	SER	A	270	-23.949	1.519	8.504	1.00	26.55	C
ATOM	2110	O	SER	A	270	-24.139	0.582	9.286	1.00	26.34	O
ATOM	2111	CB	SER	A	270	-25.359	0.589	6.623	1.00	28.19	C
ATOM	2112	OG	SER	A	270	-24.224	0.037	5.957	1.00	30.87	O
ATOM	2113	N	ILE	A	271	-22.895	2.329	8.614	1.00	25.27	N
ATOM	2114	CA	ILE	A	271	-21.741	1.967	9.420	1.00	24.11	C
ATOM	2115	C	ILE	A	271	-21.253	3.034	10.393	1.00	25.93	C
ATOM	2116	O	ILE	A	271	-21.228	2.784	11.593	1.00	27.16	O
ATOM	2117	CB	ILE	A	271	-20.578	1.539	8.535	1.00	25.05	C
ATOM	2118	CG1	ILE	A	271	-20.832	0.113	8.013	1.00	27.97	C
ATOM	2119	CG2	ILE	A	271	-19.278	1.600	9.305	1.00	24.66	C
ATOM	2120	CD1	ILE	A	271	-19.661	-0.523	7.232	1.00	23.58	C
ATOM	2121	N	SER	A	272	-20.749	4.167	9.908	1.00	27.76	N
ATOM	2122	CA	SER	A	272	-20.329	5.238	10.836	1.00	28.74	C
ATOM	2123	C	SER	A	272	-20.165	6.631	10.227	1.00	27.74	C
ATOM	2124	O	SER	A	272	-19.123	7.259	10.418	1.00	26.72	O
ATOM	2125	CB	SER	A	272	-19.018	4.837	11.530	1.00	30.16	C
ATOM	2126	OG	SER	A	272	-18.380	5.901	12.239	1.00	27.56	O
ATOM	2127	N	SER	A	273	-21.257	7.182	9.701	1.00	27.40	N

ATOM	2128	CA	SER	A	273	-21.236	8.458	8.970	1.00	26.73	C
ATOM	2129	C	SER	A	273	-19.842	9.066	8.643	1.00	25.15	C
ATOM	2130	O	SER	A	273	-19.475	9.204	7.468	1.00	20.82	O
ATOM	2131	CB	SER	A	273	-22.110	9.495	9.714	1.00	25.04	C
ATOM	2132	OG	SER	A	273	-21.417	10.725	9.872	1.00	24.31	O
ATOM	2133	N	LYS	A	274	-19.104	9.433	9.697	1.00	24.05	N
ATOM	2134	CA	LYS	A	274	-17.875	10.230	9.625	1.00	24.74	C
ATOM	2135	C	LYS	A	274	-16.764	9.750	8.705	1.00	22.58	C
ATOM	2136	O	LYS	A	274	-15.721	10.376	8.669	1.00	21.30	O
ATOM	2137	CB	LYS	A	274	-17.260	10.431	11.024	1.00	25.80	C
ATOM	2138	CG	LYS	A	274	-18.220	10.937	12.072	1.00	29.40	C
ATOM	2139	CD	LYS	A	274	-18.241	12.437	12.131	1.00	33.71	C
ATOM	2140	CE	LYS	A	274	-18.315	12.928	13.589	1.00	34.96	C
ATOM	2141	NZ	LYS	A	274	-17.356	14.082	13.815	1.00	34.17	N1+
ATOM	2142	N	LEU	A	275	-16.941	8.657	7.970	1.00	23.57	N
ATOM	2143	CA	LEU	A	275	-15.937	8.325	6.959	1.00	23.18	C
ATOM	2144	C	LEU	A	275	-16.330	8.834	5.585	1.00	22.54	C
ATOM	2145	O	LEU	A	275	-16.224	8.104	4.610	1.00	21.30	O
ATOM	2146	CB	LEU	A	275	-15.652	6.828	6.872	1.00	21.39	C
ATOM	2147	CG	LEU	A	275	-16.319	5.772	7.741	1.00	23.35	C
ATOM	2148	CD1	LEU	A	275	-17.580	5.221	7.072	1.00	23.95	C
ATOM	2149	CD2	LEU	A	275	-15.319	4.663	7.986	1.00	22.41	C
ATOM	2150	N	LYS	A	276	-16.828	10.073	5.514	1.00	25.95	N
ATOM	2151	CA	LYS	A	276	-16.886	10.830	4.247	1.00	26.73	C
ATOM	2152	C	LYS	A	276	-15.478	11.187	3.799	1.00	25.18	C
ATOM	2153	O	LYS	A	276	-14.865	10.434	3.052	1.00	25.22	O
ATOM	2154	CB	LYS	A	276	-17.710	12.129	4.402	1.00	29.83	C
ATOM	2155	CG	LYS	A	276	-17.702	12.805	5.801	1.00	30.45	C
ATOM	2156	CD	LYS	A	276	-16.755	14.005	5.874	1.00	30.09	C
ATOM	2157	CE	LYS	A	276	-16.974	14.966	4.712	1.00	31.30	C
ATOM	2158	NZ	LYS	A	276	-18.160	15.877	4.882	1.00	29.48	N1+
ATOM	2159	N	GLU	A	277	-14.899	12.172	4.482	1.00	25.27	N
ATOM	2160	CA	GLU	A	277	-13.552	12.674	4.211	1.00	26.60	C
ATOM	2161	C	GLU	A	277	-12.640	11.674	3.545	1.00	25.74	C
ATOM	2162	O	GLU	A	277	-12.369	11.752	2.348	1.00	25.45	O
ATOM	2163	CB	GLU	A	277	-12.899	13.131	5.511	1.00	26.87	C
ATOM	2164	CG	GLU	A	277	-13.175	14.597	5.841	1.00	31.72	C
ATOM	2165	CD	GLU	A	277	-12.559	15.583	4.830	1.00	30.45	C
ATOM	2166	OE1	GLU	A	277	-13.198	15.870	3.787	1.00	27.15	O
ATOM	2167	OE2	GLU	A	277	-11.473	16.133	5.136	1.00	30.36	O1-
ATOM	2168	N	CYS	A	278	-12.396	10.601	4.270	1.00	26.80	N
ATOM	2169	CA	CYS	A	278	-11.438	9.582	3.859	1.00	27.12	C
ATOM	2170	C	CYS	A	278	-12.143	8.579	2.975	1.00	23.38	C
ATOM	2171	O	CYS	A	278	-12.167	7.391	3.233	1.00	24.65	O
ATOM	2172	CB	CYS	A	278	-10.871	8.920	5.104	1.00	31.72	C
ATOM	2173	SG	CYS	A	278	-11.643	9.660	6.586	1.00	33.14	S
ATOM	2174	N	CYS	A	279	-12.574	9.086	1.842	1.00	21.92	N
ATOM	2175	CA	CYS	A	279	-13.315	8.339	0.856	1.00	20.79	C
ATOM	2176	C	CYS	A	279	-13.460	9.359	-0.255	1.00	21.27	C
ATOM	2177	O	CYS	A	279	-13.962	9.073	-1.350	1.00	22.78	O
ATOM	2178	CB	CYS	A	279	-14.661	7.929	1.439	1.00	19.99	C
ATOM	2179	SG	CYS	A	279	-14.510	6.478	2.522	1.00	21.12	S
ATOM	2180	N	GLU	A	280	-13.143	10.594	0.107	1.00	18.93	N
ATOM	2181	CA	GLU	A	280	-12.521	11.517	-0.799	1.00	19.87	C
ATOM	2182	C	GLU	A	280	-11.046	11.586	-0.419	1.00	21.37	C
ATOM	2183	O	GLU	A	280	-10.570	12.645	-0.028	1.00	22.62	O
ATOM	2184	CB	GLU	A	280	-13.152	12.896	-0.661	1.00	19.56	C
ATOM	2185	CG	GLU	A	280	-14.562	12.867	-0.153	1.00	22.77	C
ATOM	2186	CD	GLU	A	280	-15.551	12.438	-1.207	1.00	24.09	C
ATOM	2187	OE1	GLU	A	280	-15.638	11.225	-1.511	1.00	22.38	O
ATOM	2188	OE2	GLU	A	280	-16.260	13.325	-1.723	1.00	26.29	O1-
ATOM	2189	N	LYS	A	281	-10.362	10.437	-0.413	1.00	21.75	N
ATOM	2190	CA	LYS	A	281	-8.896	10.399	-0.281	1.00	22.31	C
ATOM	2191	C	LYS	A	281	-8.246	9.170	-0.941	1.00	23.66	C
ATOM	2192	O	LYS	A	281	-8.367	8.041	-0.431	1.00	25.63	O
ATOM	2193	CB	LYS	A	281	-8.474	10.459	1.188	1.00	19.47	C
ATOM	2194	CG	LYS	A	281	-8.113	11.852	1.682	1.00	21.76	C
ATOM	2195	CD	LYS	A	281	-8.906	12.198	2.952	1.00	25.79	C
ATOM	2196	CE	LYS	A	281	-8.282	13.351	3.761	1.00	27.84	C
ATOM	2197	NZ	LYS	A	281	-7.158	12.950	4.670	1.00	23.24	N1+
ATOM	2198	N	PRO	A	282	-7.451	9.396	-2.015	1.00	20.78	N

ATOM	2199	CA	PRO	A	282	-6.604	8.401	-2.683	1.00	19.52	C
ATOM	2200	C	PRO	A	282	-6.214	7.216	-1.818	1.00	19.87	C
ATOM	2201	O	PRO	A	282	-5.362	7.365	-0.939	1.00	19.82	O
ATOM	2202	CB	PRO	A	282	-5.376	9.210	-3.100	1.00	16.20	C
ATOM	2203	CG	PRO	A	282	-5.586	10.592	-2.507	1.00	15.71	C
ATOM	2204	CD	PRO	A	282	-7.052	10.740	-2.438	1.00	17.15	C
ATOM	2205	N	LEU	A	283	-6.642	6.027	-2.254	1.00	20.57	N
ATOM	2206	CA	LEU	A	283	-6.610	4.787	-1.461	1.00	20.98	C
ATOM	2207	C	LEU	A	283	-5.739	4.913	-0.252	1.00	20.62	C
ATOM	2208	O	LEU	A	283	-6.176	5.479	0.723	1.00	18.64	O
ATOM	2209	CB	LEU	A	283	-6.147	3.585	-2.288	1.00	22.23	C
ATOM	2210	CG	LEU	A	283	-6.130	2.292	-1.452	1.00	23.90	C
ATOM	2211	CD1	LEU	A	283	-7.217	1.299	-1.964	1.00	22.21	C
ATOM	2212	CD2	LEU	A	283	-4.730	1.673	-1.500	1.00	20.45	C
ATOM	2213	N	LEU	A	284	-4.471	4.536	-0.395	1.00	22.99	N
ATOM	2214	CA	LEU	A	284	-3.396	4.918	0.519	1.00	26.73	C
ATOM	2215	C	LEU	A	284	-3.912	5.607	1.803	1.00	28.33	C
ATOM	2216	O	LEU	A	284	-4.326	4.906	2.739	1.00	28.88	O
ATOM	2217	CB	LEU	A	284	-2.385	5.825	-0.225	1.00	28.31	C
ATOM	2218	CG	LEU	A	284	-1.765	5.434	-1.595	1.00	26.94	C
ATOM	2219	CD1	LEU	A	284	-1.303	6.690	-2.364	1.00	20.85	C
ATOM	2220	CD2	LEU	A	284	-0.594	4.469	-1.384	1.00	26.30	C
ATOM	2221	N	GLU	A	285	-4.223	6.906	1.683	1.00	28.79	N
ATOM	2222	CA	GLU	A	285	-4.614	7.759	2.825	1.00	28.34	C
ATOM	2223	C	GLU	A	285	-6.001	7.475	3.396	1.00	26.33	C
ATOM	2224	O	GLU	A	285	-6.293	7.857	4.516	1.00	28.65	O
ATOM	2225	CB	GLU	A	285	-4.542	9.247	2.462	1.00	28.57	C
ATOM	2226	CG	GLU	A	285	-3.144	9.754	2.142	1.00	29.88	C
ATOM	2227	CD	GLU	A	285	-3.105	10.581	0.870	1.00	30.17	C
ATOM	2228	OE1	GLU	A	285	-3.483	11.778	0.920	1.00	29.25	O
ATOM	2229	OE2	GLU	A	285	-2.744	10.009	-0.185	1.00	28.46	O1-
ATOM	2230	N	LYS	A	286	-6.880	6.870	2.617	1.00	26.40	N
ATOM	2231	CA	LYS	A	286	-8.030	6.193	3.204	1.00	26.58	C
ATOM	2232	C	LYS	A	286	-7.525	5.430	4.440	1.00	24.48	C
ATOM	2233	O	LYS	A	286	-7.732	5.868	5.567	1.00	25.77	O
ATOM	2234	CB	LYS	A	286	-8.650	5.179	2.218	1.00	27.97	C
ATOM	2235	CG	LYS	A	286	-9.914	5.578	1.425	1.00	19.93	C
ATOM	2236	CD	LYS	A	286	-10.135	4.498	0.364	1.00	19.31	C
ATOM	2237	CE	LYS	A	286	-11.548	4.386	-0.099	1.00	16.08	C
ATOM	2238	NZ	LYS	A	286	-12.013	5.632	-0.734	1.00	16.67	N1+
ATOM	2239	N	SER	A	287	-6.716	4.406	4.244	1.00	19.71	N
ATOM	2240	CA	SER	A	287	-6.403	3.545	5.359	1.00	19.25	C
ATOM	2241	C	SER	A	287	-5.478	4.164	6.423	1.00	19.83	C
ATOM	2242	O	SER	A	287	-4.917	3.451	7.252	1.00	19.56	O
ATOM	2243	CB	SER	A	287	-5.832	2.230	4.832	1.00	22.16	C
ATOM	2244	OG	SER	A	287	-6.709	1.646	3.874	1.00	24.16	O
ATOM	2245	N	HIS	A	288	-5.335	5.486	6.427	1.00	20.41	N
ATOM	2246	CA	HIS	A	288	-4.825	6.194	7.611	1.00	23.21	C
ATOM	2247	C	HIS	A	288	-5.564	7.515	7.785	1.00	24.49	C
ATOM	2248	O	HIS	A	288	-4.955	8.582	7.929	1.00	24.42	O
ATOM	2249	CB	HIS	A	288	-3.315	6.446	7.531	1.00	23.44	C
ATOM	2250	CG	HIS	A	288	-2.712	6.985	8.800	1.00	24.13	C
ATOM	2251	CD2	HIS	A	288	-2.834	8.190	9.411	1.00	22.19	C
ATOM	2252	ND1	HIS	A	288	-1.809	6.267	9.556	1.00	25.67	N
ATOM	2253	CE1	HIS	A	288	-1.401	7.001	10.576	1.00	23.98	C
ATOM	2254	NE2	HIS	A	288	-2.009	8.172	10.512	1.00	26.26	N
ATOM	2255	N	CYS	A	289	-6.865	7.447	7.540	1.00	25.16	N
ATOM	2256	CA	CYS	A	289	-7.819	8.301	8.209	1.00	26.57	C
ATOM	2257	C	CYS	A	289	-8.701	7.377	9.055	1.00	25.76	C
ATOM	2258	O	CYS	A	289	-9.060	7.710	10.192	1.00	26.10	O
ATOM	2259	CB	CYS	A	289	-8.716	9.020	7.218	1.00	26.87	C
ATOM	2260	SG	CYS	A	289	-10.336	9.115	8.027	1.00	35.83	S
ATOM	2261	N	ILE	A	290	-9.231	6.354	8.381	1.00	23.01	N
ATOM	2262	CA	ILE	A	290	-9.982	5.262	8.996	1.00	20.80	C
ATOM	2263	C	ILE	A	290	-9.125	4.551	10.043	1.00	21.11	C
ATOM	2264	O	ILE	A	290	-9.551	4.335	11.168	1.00	22.48	O
ATOM	2265	CB	ILE	A	290	-10.432	4.241	7.920	1.00	17.33	C
ATOM	2266	CG1	ILE	A	290	-11.770	4.670	7.312	1.00	16.61	C
ATOM	2267	CG2	ILE	A	290	-10.558	2.866	8.514	1.00	19.50	C
ATOM	2268	CD1	ILE	A	290	-11.867	4.462	5.808	1.00	11.81	C
ATOM	2269	N	ALA	A	291	-7.920	4.156	9.665	1.00	20.66	N

ATOM	2270	CA	ALA	A	291	-6.948	3.747	10.664	1.00	20.97	C
ATOM	2271	C	ALA	A	291	-6.893	4.911	11.619	1.00	19.91	C
ATOM	2272	O	ALA	A	291	-7.270	6.008	11.249	1.00	18.39	O
ATOM	2273	CB	ALA	A	291	-5.583	3.518	10.024	1.00	21.17	C
ATOM	2274	N	GLU	A	292	-6.302	4.720	12.784	1.00	21.16	N
ATOM	2275	CA	GLU	A	292	-6.572	5.631	13.881	1.00	24.55	C
ATOM	2276	C	GLU	A	292	-6.249	7.130	13.695	1.00	26.59	C
ATOM	2277	O	GLU	A	292	-5.185	7.622	14.100	1.00	27.80	O
ATOM	2278	CB	GLU	A	292	-5.962	5.076	15.170	1.00	24.02	C
ATOM	2279	CG	GLU	A	292	-6.808	3.952	15.736	1.00	23.17	C
ATOM	2280	CD	GLU	A	292	-6.260	3.354	17.010	1.00	25.80	C
ATOM	2281	OE1	GLU	A	292	-6.050	4.132	17.989	1.00	23.17	O
ATOM	2282	OE2	GLU	A	292	-6.112	2.098	17.040	1.00	20.76	O1-
ATOM	2283	N	VAL	A	293	-7.121	7.800	12.940	1.00	26.75	N
ATOM	2284	CA	VAL	A	293	-7.593	9.139	13.260	1.00	26.08	C
ATOM	2285	C	VAL	A	293	-9.082	9.127	12.906	1.00	26.05	C
ATOM	2286	O	VAL	A	293	-9.506	9.564	11.824	1.00	23.87	O
ATOM	2287	CB	VAL	A	293	-6.824	10.236	12.489	1.00	26.52	C
ATOM	2288	CG1	VAL	A	293	-7.586	11.572	12.540	1.00	23.04	C
ATOM	2289	CG2	VAL	A	293	-5.434	10.417	13.116	1.00	25.28	C
ATOM	2290	N	GLU	A	294	-9.845	8.465	13.774	1.00	26.28	N
ATOM	2291	CA	GLU	A	294	-11.252	8.203	13.506	1.00	27.28	C
ATOM	2292	C	GLU	A	294	-12.157	8.786	14.564	1.00	25.18	C
ATOM	2293	O	GLU	A	294	-12.655	8.059	15.407	1.00	25.83	O
ATOM	2294	CB	GLU	A	294	-11.509	6.688	13.403	1.00	29.38	C
ATOM	2295	CG	GLU	A	294	-11.930	6.202	12.013	1.00	27.11	C
ATOM	2296	CD	GLU	A	294	-12.826	7.200	11.307	1.00	28.00	C
ATOM	2297	OE1	GLU	A	294	-12.301	8.229	10.798	1.00	24.31	O
ATOM	2298	OE2	GLU	A	294	-14.056	6.961	11.289	1.00	26.88	O1-
ATOM	2299	N	ASN	A	295	-12.381	10.093	14.525	1.00	23.72	N
ATOM	2300	CA	ASN	A	295	-13.248	10.720	15.510	1.00	21.83	C
ATOM	2301	C	ASN	A	295	-14.523	9.893	15.424	1.00	18.95	C
ATOM	2302	O	ASN	A	295	-14.920	9.519	14.325	1.00	16.49	O
ATOM	2303	CB	ASN	A	295	-13.476	12.217	15.175	1.00	23.98	C
ATOM	2304	CG	ASN	A	295	-13.935	13.068	16.404	1.00	27.75	C
ATOM	2305	ND2	ASN	A	295	-13.404	12.768	17.605	1.00	26.54	N
ATOM	2306	OD1	ASN	A	295	-14.706	14.027	16.242	1.00	27.01	O
ATOM	2307	N	ASP	A	296	-14.757	9.198	16.536	1.00	19.63	N
ATOM	2308	CA	ASP	A	296	-15.900	8.306	16.708	1.00	18.42	C
ATOM	2309	C	ASP	A	296	-17.117	9.146	16.474	1.00	18.35	C
ATOM	2310	O	ASP	A	296	-17.158	10.280	16.940	1.00	19.40	O
ATOM	2311	CB	ASP	A	296	-16.006	7.790	18.155	1.00	17.52	C
ATOM	2312	CG	ASP	A	296	-14.676	7.708	18.867	1.00	16.66	C
ATOM	2313	OD1	ASP	A	296	-14.270	8.699	19.506	1.00	16.57	O
ATOM	2314	OD2	ASP	A	296	-14.096	6.609	18.887	1.00	17.73	O1-
ATOM	2315	N	GLU	A	297	-18.180	8.541	15.963	1.00	20.63	N
ATOM	2316	CA	GLU	A	297	-19.492	9.152	16.137	1.00	22.06	C
ATOM	2317	C	GLU	A	297	-20.176	8.612	17.385	1.00	20.95	C
ATOM	2318	O	GLU	A	297	-21.015	7.728	17.316	1.00	17.62	O
ATOM	2319	CB	GLU	A	297	-20.393	8.974	14.910	1.00	22.28	C
ATOM	2320	CG	GLU	A	297	-21.083	10.290	14.487	1.00	19.78	C
ATOM	2321	CD	GLU	A	297	-22.552	10.114	14.097	1.00	17.46	C
ATOM	2322	OE1	GLU	A	297	-23.107	9.029	14.331	1.00	18.89	O
ATOM	2323	OE2	GLU	A	297	-23.177	11.082	13.618	1.00	17.10	O1-
ATOM	2324	N	MET	A	298	-19.640	9.016	18.530	1.00	21.96	N
ATOM	2325	CA	MET	A	298	-20.458	9.312	19.694	1.00	23.40	C
ATOM	2326	C	MET	A	298	-21.712	10.057	19.184	1.00	25.29	C
ATOM	2327	O	MET	A	298	-21.650	10.760	18.154	1.00	23.28	O
ATOM	2328	CB	MET	A	298	-19.659	10.192	20.679	1.00	23.66	C
ATOM	2329	CG	MET	A	298	-19.890	11.713	20.580	1.00	23.57	C
ATOM	2330	SD	MET	A	298	-21.327	12.337	21.577	1.00	29.35	S
ATOM	2331	CE	MET	A	298	-20.736	14.067	22.065	1.00	21.21	C
ATOM	2332	N	PRO	A	299	-22.855	9.926	19.902	1.00	25.70	N
ATOM	2333	CA	PRO	A	299	-22.933	9.341	21.242	1.00	23.52	C
ATOM	2334	C	PRO	A	299	-23.444	7.894	21.195	1.00	22.57	C
ATOM	2335	O	PRO	A	299	-22.991	7.044	21.985	1.00	18.81	O
ATOM	2336	CB	PRO	A	299	-23.889	10.297	21.982	1.00	24.67	C
ATOM	2337	CG	PRO	A	299	-24.523	11.190	20.892	1.00	23.48	C
ATOM	2338	CD	PRO	A	299	-24.126	10.590	19.566	1.00	26.37	C
ATOM	2339	N	ALA	A	300	-24.449	7.663	20.336	1.00	23.45	N
ATOM	2340	CA	ALA	A	300	-24.730	6.330	19.769	1.00	24.55	C

ATOM	2341	C	ALA	A	300	-26.034	6.174	18.960	1.00	23.16	C
ATOM	2342	O	ALA	A	300	-26.739	7.152	18.691	1.00	21.49	O
ATOM	2343	CB	ALA	A	300	-24.655	5.248	20.867	1.00	26.49	C
ATOM	2344	N	ASP	A	301	-26.398	4.908	18.733	1.00	24.12	N
ATOM	2345	CA	ASP	A	301	-27.360	4.437	17.718	1.00	25.32	C
ATOM	2346	C	ASP	A	301	-28.711	5.075	17.818	1.00	26.66	C
ATOM	2347	O	ASP	A	301	-29.504	4.991	16.890	1.00	27.53	O
ATOM	2348	CB	ASP	A	301	-27.548	2.919	17.890	1.00	26.16	C
ATOM	2349	CG	ASP	A	301	-28.362	2.254	16.767	1.00	27.64	C
ATOM	2350	OD1	ASP	A	301	-28.582	2.850	15.681	1.00	27.63	O
ATOM	2351	OD2	ASP	A	301	-28.674	1.051	16.947	1.00	26.67	O1-
ATOM	2352	N	LEU	A	302	-28.958	5.727	18.946	1.00	30.35	N
ATOM	2353	CA	LEU	A	302	-30.086	5.351	19.792	1.00	31.56	C
ATOM	2354	C	LEU	A	302	-30.537	6.488	20.686	1.00	33.72	C
ATOM	2355	O	LEU	A	302	-29.798	7.474	20.867	1.00	34.95	O
ATOM	2356	CB	LEU	A	302	-29.647	4.182	20.653	1.00	28.92	C
ATOM	2357	CG	LEU	A	302	-28.155	4.371	20.967	1.00	31.25	C
ATOM	2358	CD1	LEU	A	302	-27.961	5.472	22.020	1.00	31.44	C
ATOM	2359	CD2	LEU	A	302	-27.489	3.041	21.378	1.00	32.08	C
ATOM	2360	N	PRO	A	303	-31.584	6.224	21.488	1.00	35.90	N
ATOM	2361	CA	PRO	A	303	-31.430	6.284	22.954	1.00	38.93	C
ATOM	2362	C	PRO	A	303	-30.874	4.971	23.513	1.00	38.86	C
ATOM	2363	O	PRO	A	303	-29.892	4.975	24.269	1.00	38.96	O
ATOM	2364	CB	PRO	A	303	-32.853	6.564	23.459	1.00	38.70	C
ATOM	2365	CG	PRO	A	303	-33.766	6.592	22.142	1.00	38.82	C
ATOM	2366	CD	PRO	A	303	-32.961	5.875	21.101	1.00	36.51	C
ATOM	2367	N	SER	A	304	-31.360	3.855	22.964	1.00	37.24	N
ATOM	2368	CA	SER	A	304	-31.097	2.522	23.528	1.00	35.92	C
ATOM	2369	C	SER	A	304	-31.120	2.445	25.034	1.00	32.14	C
ATOM	2370	O	SER	A	304	-30.681	1.441	25.597	1.00	30.33	O
ATOM	2371	CB	SER	A	304	-29.774	1.948	23.042	1.00	36.77	C
ATOM	2372	OG	SER	A	304	-30.029	0.971	22.042	1.00	42.09	O
ATOM	2373	N	LEU	A	305	-31.942	3.312	25.607	1.00	30.13	N
ATOM	2374	CA	LEU	A	305	-32.018	3.481	27.031	1.00	30.37	C
ATOM	2375	C	LEU	A	305	-30.913	2.663	27.730	1.00	31.82	C
ATOM	2376	O	LEU	A	305	-29.749	3.000	27.555	1.00	35.56	O
ATOM	2377	CB	LEU	A	305	-33.405	3.084	27.532	1.00	29.63	C
ATOM	2378	CG	LEU	A	305	-34.657	3.305	26.681	1.00	28.08	C
ATOM	2379	CD1	LEU	A	305	-35.835	3.366	27.647	1.00	28.23	C
ATOM	2380	CD2	LEU	A	305	-34.583	4.576	25.848	1.00	26.17	C
ATOM	2381	N	ALA	A	306	-31.218	1.418	28.097	1.00	28.81	N
ATOM	2382	CA	ALA	A	306	-30.480	0.759	29.160	1.00	25.85	C
ATOM	2383	C	ALA	A	306	-30.048	-0.635	28.744	1.00	24.00	C
ATOM	2384	O	ALA	A	306	-30.699	-1.241	27.912	1.00	23.85	O
ATOM	2385	CB	ALA	A	306	-31.353	0.688	30.406	1.00	28.20	C
ATOM	2386	N	ALA	A	307	-29.050	-1.198	29.422	1.00	22.64	N
ATOM	2387	CA	ALA	A	307	-28.519	-2.505	29.043	1.00	24.62	C
ATOM	2388	C	ALA	A	307	-28.896	-3.578	30.063	1.00	25.94	C
ATOM	2389	O	ALA	A	307	-28.053	-4.112	30.807	1.00	22.41	O
ATOM	2390	CB	ALA	A	307	-26.990	-2.432	28.860	1.00	26.11	C
ATOM	2391	N	ASP	A	308	-30.187	-3.895	30.092	1.00	28.91	N
ATOM	2392	CA	ASP	A	308	-30.732	-4.831	31.078	1.00	27.05	C
ATOM	2393	C	ASP	A	308	-31.350	-6.031	30.350	1.00	26.11	C
ATOM	2394	O	ASP	A	308	-32.535	-6.372	30.516	1.00	24.92	O
ATOM	2395	CB	ASP	A	308	-31.721	-4.099	32.001	1.00	25.32	C
ATOM	2396	CG	ASP	A	308	-31.006	-3.359	33.154	1.00	25.24	C
ATOM	2397	OD1	ASP	A	308	-29.958	-3.840	33.629	1.00	19.08	O
ATOM	2398	OD2	ASP	A	308	-31.452	-2.267	33.552	1.00	27.30	O1-
ATOM	2399	N	PHE	A	309	-30.575	-6.493	29.370	1.00	21.83	N
ATOM	2400	CA	PHE	A	309	-30.779	-7.762	28.711	1.00	18.30	C
ATOM	2401	C	PHE	A	309	-29.716	-8.657	29.238	1.00	15.33	C
ATOM	2402	O	PHE	A	309	-29.757	-9.841	29.018	1.00	18.02	O
ATOM	2403	CB	PHE	A	309	-30.554	-7.614	27.217	1.00	21.96	C
ATOM	2404	CG	PHE	A	309	-31.727	-8.017	26.378	1.00	22.43	C
ATOM	2405	CD1	PHE	A	309	-33.007	-8.013	26.902	1.00	21.17	C
ATOM	2406	CD2	PHE	A	309	-31.532	-8.450	25.084	1.00	21.60	C
ATOM	2407	CE1	PHE	A	309	-34.060	-8.440	26.163	1.00	22.58	C
ATOM	2408	CE2	PHE	A	309	-32.577	-8.876	24.337	1.00	24.09	C
ATOM	2409	CZ	PHE	A	309	-33.851	-8.876	24.874	1.00	26.92	C
ATOM	2410	N	VAL	A	310	-28.619	-8.040	29.631	1.00	17.52	N
ATOM	2411	CA	VAL	A	310	-27.491	-8.754	30.234	1.00	21.16	C

ATOM	2412	C	VAL	A	310	-27.676	-8.866	31.760	1.00	22.19	C
ATOM	2413	O	VAL	A	310	-26.735	-9.228	32.476	1.00	19.99	O
ATOM	2414	CB	VAL	A	310	-26.093	-8.031	29.910	1.00	22.76	C
ATOM	2415	CG1	VAL	A	310	-26.078	-7.481	28.455	1.00	16.58	C
ATOM	2416	CG2	VAL	A	310	-25.796	-6.903	30.929	1.00	19.12	C
ATOM	2417	N	GLU	A	311	-28.904	-8.615	32.231	1.00	24.86	N
ATOM	2418	CA	GLU	A	311	-29.132	-8.190	33.620	1.00	25.85	C
ATOM	2419	C	GLU	A	311	-30.462	-8.620	34.250	1.00	26.80	C
ATOM	2420	O	GLU	A	311	-30.617	-9.786	34.614	1.00	26.88	O
ATOM	2421	CB	GLU	A	311	-28.997	-6.672	33.724	1.00	24.55	C
ATOM	2422	CG	GLU	A	311	-28.150	-6.231	34.893	1.00	24.81	C
ATOM	2423	CD	GLU	A	311	-28.390	-7.071	36.097	1.00	22.49	C
ATOM	2424	OE1	GLU	A	311	-29.486	-6.952	36.659	1.00	27.72	O
ATOM	2425	OE2	GLU	A	311	-27.551	-7.932	36.415	1.00	21.47	O1-
ATOM	2426	N	SER	A	312	-31.340	-7.646	34.518	1.00	27.11	N
ATOM	2427	CA	SER	A	312	-32.668	-7.899	35.086	1.00	28.09	C
ATOM	2428	C	SER	A	312	-33.508	-8.811	34.212	1.00	29.00	C
ATOM	2429	O	SER	A	312	-34.603	-8.413	33.813	1.00	32.24	O
ATOM	2430	CB	SER	A	312	-33.463	-6.594	35.244	1.00	25.60	C
ATOM	2431	OG	SER	A	312	-32.912	-5.751	36.227	1.00	29.41	O
ATOM	2432	N	LYS	A	313	-33.071	-10.047	34.005	1.00	27.40	N
ATOM	2433	CA	LYS	A	313	-33.782	-10.965	33.129	1.00	27.14	C
ATOM	2434	C	LYS	A	313	-33.672	-12.368	33.711	1.00	30.75	C
ATOM	2435	O	LYS	A	313	-33.007	-12.566	34.740	1.00	31.32	O
ATOM	2436	CB	LYS	A	313	-33.153	-10.936	31.738	1.00	21.94	C
ATOM	2437	CG	LYS	A	313	-33.859	-11.786	30.716	1.00	17.30	C
ATOM	2438	CD	LYS	A	313	-34.578	-10.916	29.723	1.00	15.90	C
ATOM	2439	CE	LYS	A	313	-34.503	-11.512	28.346	1.00	12.19	C
ATOM	2440	NZ	LYS	A	313	-33.124	-11.478	27.875	1.00	14.13	N1+
ATOM	2441	N	ASP	A	314	-34.367	-13.332	33.102	1.00	33.04	N
ATOM	2442	CA	ASP	A	314	-33.947	-14.726	33.210	1.00	34.53	C
ATOM	2443	C	ASP	A	314	-33.696	-15.303	31.820	1.00	34.78	C
ATOM	2444	O	ASP	A	314	-34.638	-15.649	31.091	1.00	34.31	O
ATOM	2445	CB	ASP	A	314	-34.962	-15.587	33.974	1.00	34.53	C
ATOM	2446	CG	ASP	A	314	-34.538	-17.065	34.066	1.00	36.92	C
ATOM	2447	OD1	ASP	A	314	-33.379	-17.438	33.692	1.00	33.31	O
ATOM	2448	OD2	ASP	A	314	-35.415	-17.878	34.458	1.00	41.34	O1-
ATOM	2449	N	VAL	A	315	-32.463	-15.055	31.384	1.00	33.55	N
ATOM	2450	CA	VAL	A	315	-31.752	-15.855	30.402	1.00	30.37	C
ATOM	2451	C	VAL	A	315	-30.272	-15.815	30.829	1.00	28.87	C
ATOM	2452	O	VAL	A	315	-29.493	-14.952	30.414	1.00	25.57	O
ATOM	2453	CB	VAL	A	315	-31.929	-15.287	28.979	1.00	32.83	C
ATOM	2454	CG1	VAL	A	315	-33.417	-15.436	28.512	1.00	29.71	C
ATOM	2455	CG2	VAL	A	315	-31.453	-13.820	28.934	1.00	33.25	C
ATOM	2456	N	CYS	A	316	-30.032	-16.517	31.931	1.00	29.88	N
ATOM	2457	CA	CYS	A	316	-28.683	-16.794	32.423	1.00	27.73	C
ATOM	2458	C	CYS	A	316	-27.953	-17.584	31.361	1.00	26.33	C
ATOM	2459	O	CYS	A	316	-27.153	-17.013	30.620	1.00	26.76	O
ATOM	2460	CB	CYS	A	316	-28.734	-17.628	33.688	1.00	27.85	C
ATOM	2461	SG	CYS	A	316	-27.077	-18.069	34.276	1.00	31.37	S
ATOM	2462	N	LYS	A	317	-28.313	-18.863	31.217	1.00	22.54	N
ATOM	2463	CA	LYS	A	317	-27.900	-19.631	30.046	1.00	21.29	C
ATOM	2464	C	LYS	A	317	-28.905	-19.504	28.912	1.00	22.46	C
ATOM	2465	O	LYS	A	317	-28.510	-19.220	27.790	1.00	22.63	O
ATOM	2466	CB	LYS	A	317	-27.693	-21.120	30.369	1.00	18.85	C
ATOM	2467	CG	LYS	A	317	-26.247	-21.541	30.640	1.00	18.02	C
ATOM	2468	CD	LYS	A	317	-26.179	-22.731	31.604	1.00	20.06	C
ATOM	2469	CE	LYS	A	317	-24.770	-22.943	32.219	1.00	22.33	C
ATOM	2470	NZ	LYS	A	317	-24.375	-24.401	32.437	1.00	22.00	N1+
ATOM	2471	N	ASN	A	318	-30.201	-19.646	29.199	1.00	22.97	N
ATOM	2472	CA	ASN	A	318	-31.215	-19.864	28.143	1.00	22.32	C
ATOM	2473	C	ASN	A	318	-30.963	-19.181	26.798	1.00	24.26	C
ATOM	2474	O	ASN	A	318	-31.447	-19.657	25.759	1.00	26.24	O
ATOM	2475	CB	ASN	A	318	-32.607	-19.439	28.601	1.00	19.64	C
ATOM	2476	CG	ASN	A	318	-33.659	-19.693	27.542	1.00	17.20	C
ATOM	2477	ND2	ASN	A	318	-33.852	-18.753	26.630	1.00	17.37	N
ATOM	2478	OD1	ASN	A	318	-34.234	-20.753	27.507	1.00	19.89	O
ATOM	2479	N	TYR	A	319	-30.390	-17.978	26.856	1.00	23.97	N
ATOM	2480	CA	TYR	A	319	-30.222	-17.095	25.694	1.00	24.24	C
ATOM	2481	C	TYR	A	319	-28.722	-16.854	25.621	1.00	23.49	C
ATOM	2482	O	TYR	A	319	-28.250	-15.857	25.088	1.00	22.66	O

ATOM	2483	CB	TYR	A	319	-31.022	-15.804	25.948	1.00	23.01	C
ATOM	2484	CG	TYR	A	319	-30.749	-14.587	25.094	1.00	22.30	C
ATOM	2485	CD1	TYR	A	319	-31.440	-14.393	23.908	1.00	24.18	C
ATOM	2486	CD2	TYR	A	319	-30.040	-13.502	25.616	1.00	20.42	C
ATOM	2487	CE1	TYR	A	319	-31.453	-13.148	23.278	1.00	23.68	C
ATOM	2488	CE2	TYR	A	319	-30.044	-12.265	24.993	1.00	17.71	C
ATOM	2489	CZ	TYR	A	319	-30.751	-12.097	23.826	1.00	20.42	C
ATOM	2490	OH	TYR	A	319	-30.732	-10.898	23.159	1.00	22.03	O
ATOM	2491	N	ALA	A	320	-27.993	-17.889	25.995	1.00	21.15	N
ATOM	2492	CA	ALA	A	320	-26.572	-17.798	26.227	1.00	23.56	C
ATOM	2493	C	ALA	A	320	-26.032	-19.198	26.089	1.00	25.78	C
ATOM	2494	O	ALA	A	320	-25.428	-19.751	27.004	1.00	25.36	O
ATOM	2495	CB	ALA	A	320	-26.290	-17.267	27.618	1.00	24.04	C
ATOM	2496	N	GLU	A	321	-26.398	-19.828	24.985	1.00	28.84	N
ATOM	2497	CA	GLU	A	321	-25.690	-21.008	24.536	1.00	27.99	C
ATOM	2498	C	GLU	A	321	-24.907	-20.746	23.257	1.00	25.24	C
ATOM	2499	O	GLU	A	321	-24.235	-21.634	22.715	1.00	27.19	O
ATOM	2500	CB	GLU	A	321	-26.658	-22.167	24.388	1.00	30.20	C
ATOM	2501	CG	GLU	A	321	-26.266	-23.326	25.298	1.00	37.63	C
ATOM	2502	CD	GLU	A	321	-25.831	-22.921	26.736	1.00	38.24	C
ATOM	2503	OE1	GLU	A	321	-24.725	-22.329	26.915	1.00	36.30	O
ATOM	2504	OE2	GLU	A	321	-26.509	-23.388	27.699	1.00	40.13	O1-
ATOM	2505	N	ALA	A	322	-24.889	-19.483	22.857	1.00	20.08	N
ATOM	2506	CA	ALA	A	322	-23.864	-19.005	21.965	1.00	17.91	C
ATOM	2507	C	ALA	A	322	-22.817	-18.388	22.879	1.00	16.32	C
ATOM	2508	O	ALA	A	322	-23.051	-17.332	23.441	1.00	17.37	O
ATOM	2509	CB	ALA	A	322	-24.437	-17.962	21.032	1.00	16.29	C
ATOM	2510	N	LYS	A	323	-21.746	-19.116	23.166	1.00	13.15	N
ATOM	2511	CA	LYS	A	323	-20.707	-18.569	24.019	1.00	13.43	C
ATOM	2512	C	LYS	A	323	-20.251	-17.244	23.408	1.00	15.07	C
ATOM	2513	O	LYS	A	323	-20.751	-16.180	23.773	1.00	14.91	O
ATOM	2514	CB	LYS	A	323	-19.537	-19.560	24.124	1.00	14.15	C
ATOM	2515	CG	LYS	A	323	-18.201	-18.956	24.571	1.00	15.59	C
ATOM	2516	CD	LYS	A	323	-17.235	-20.027	25.079	1.00	14.64	C
ATOM	2517	CE	LYS	A	323	-15.850	-19.935	24.450	1.00	14.18	C
ATOM	2518	NZ	LYS	A	323	-15.145	-18.696	24.813	1.00	15.36	N1+
ATOM	2519	N	ASP	A	324	-19.608	-17.372	22.252	1.00	17.96	N
ATOM	2520	CA	ASP	A	324	-18.847	-16.299	21.623	1.00	15.80	C
ATOM	2521	C	ASP	A	324	-19.718	-15.035	21.411	1.00	17.56	C
ATOM	2522	O	ASP	A	324	-19.304	-13.924	21.781	1.00	17.35	O
ATOM	2523	CB	ASP	A	324	-18.233	-16.790	20.275	1.00	15.91	C
ATOM	2524	CG	ASP	A	324	-17.787	-18.293	20.293	1.00	16.85	C
ATOM	2525	OD1	ASP	A	324	-16.749	-18.623	20.903	1.00	15.85	O
ATOM	2526	OD2	ASP	A	324	-18.420	-19.140	19.617	1.00	17.67	O1-
ATOM	2527	N	VAL	A	325	-20.930	-15.180	20.870	1.00	15.39	N
ATOM	2528	CA	VAL	A	325	-21.660	-13.979	20.467	1.00	18.29	C
ATOM	2529	C	VAL	A	325	-22.388	-13.305	21.613	1.00	20.30	C
ATOM	2530	O	VAL	A	325	-22.751	-12.137	21.509	1.00	20.95	O
ATOM	2531	CB	VAL	A	325	-22.693	-14.215	19.333	1.00	18.19	C
ATOM	2532	CG1	VAL	A	325	-22.039	-14.874	18.125	1.00	17.25	C
ATOM	2533	CG2	VAL	A	325	-23.875	-15.003	19.849	1.00	19.92	C
ATOM	2534	N	PHE	A	326	-22.608	-14.039	22.701	1.00	23.24	N
ATOM	2535	CA	PHE	A	326	-23.259	-13.497	23.893	1.00	22.88	C
ATOM	2536	C	PHE	A	326	-22.336	-12.431	24.476	1.00	23.49	C
ATOM	2537	O	PHE	A	326	-22.675	-11.242	24.548	1.00	20.07	O
ATOM	2538	CB	PHE	A	326	-23.474	-14.624	24.911	1.00	23.89	C
ATOM	2539	CG	PHE	A	326	-24.307	-14.229	26.092	1.00	25.04	C
ATOM	2540	CD1	PHE	A	326	-25.603	-13.781	25.923	1.00	25.47	C
ATOM	2541	CD2	PHE	A	326	-23.776	-14.256	27.367	1.00	24.57	C
ATOM	2542	CE1	PHE	A	326	-26.356	-13.354	27.016	1.00	26.31	C
ATOM	2543	CE2	PHE	A	326	-24.522	-13.830	28.453	1.00	25.69	C
ATOM	2544	CZ	PHE	A	326	-25.814	-13.375	28.277	1.00	24.50	C
ATOM	2545	N	LEU	A	327	-21.109	-12.854	24.753	1.00	24.46	N
ATOM	2546	CA	LEU	A	327	-20.056	-11.948	25.200	1.00	25.44	C
ATOM	2547	C	LEU	A	327	-19.866	-10.805	24.193	1.00	23.62	C
ATOM	2548	O	LEU	A	327	-19.782	-9.623	24.568	1.00	18.87	O
ATOM	2549	CB	LEU	A	327	-18.744	-12.727	25.357	1.00	25.68	C
ATOM	2550	CG	LEU	A	327	-18.569	-13.566	26.624	1.00	22.99	C
ATOM	2551	CD1	LEU	A	327	-18.534	-12.630	27.851	1.00	21.08	C
ATOM	2552	CD2	LEU	A	327	-19.688	-14.578	26.719	1.00	21.68	C
ATOM	2553	N	GLY	A	328	-19.861	-11.175	22.911	1.00	22.86	N

ATOM	2554	CA	GLY	A	328	-19.715	-10.197	21.850	1.00	19.96	C
ATOM	2555	C	GLY	A	328	-20.775	-9.121	21.937	1.00	18.31	C
ATOM	2556	O	GLY	A	328	-20.496	-7.961	21.651	1.00	14.99	O
ATOM	2557	N	MET	A	329	-21.988	-9.503	22.332	1.00	18.03	N
ATOM	2558	CA	MET	A	329	-23.095	-8.563	22.406	1.00	16.11	C
ATOM	2559	C	MET	A	329	-23.171	-7.903	23.772	1.00	16.92	C
ATOM	2560	O	MET	A	329	-23.768	-6.838	23.930	1.00	12.56	O
ATOM	2561	CB	MET	A	329	-24.412	-9.253	22.090	1.00	15.19	C
ATOM	2562	CG	MET	A	329	-25.567	-8.288	22.048	1.00	16.53	C
ATOM	2563	SD	MET	A	329	-26.910	-8.847	21.026	1.00	19.89	S
ATOM	2564	CE	MET	A	329	-27.585	-7.279	20.531	1.00	17.00	C
ATOM	2565	N	PHE	A	330	-22.516	-8.495	24.761	1.00	18.68	N
ATOM	2566	CA	PHE	A	330	-22.249	-7.713	25.953	1.00	20.67	C
ATOM	2567	C	PHE	A	330	-21.302	-6.630	25.467	1.00	20.74	C
ATOM	2568	O	PHE	A	330	-21.793	-5.643	24.911	1.00	18.89	O
ATOM	2569	CB	PHE	A	330	-21.628	-8.544	27.091	1.00	19.97	C
ATOM	2570	CG	PHE	A	330	-21.607	-7.824	28.417	1.00	17.23	C
ATOM	2571	CD1	PHE	A	330	-22.552	-6.854	28.710	1.00	16.05	C
ATOM	2572	CD2	PHE	A	330	-20.594	-8.041	29.323	1.00	16.93	C
ATOM	2573	CE1	PHE	A	330	-22.478	-6.118	29.854	1.00	13.30	C
ATOM	2574	CE2	PHE	A	330	-20.523	-7.294	30.483	1.00	15.90	C
ATOM	2575	CZ	PHE	A	330	-21.464	-6.336	30.738	1.00	14.36	C
ATOM	2576	N	LEU	A	331	-20.019	-7.003	25.336	1.00	21.76	N
ATOM	2577	CA	LEU	A	331	-18.930	-6.124	24.885	1.00	22.65	C
ATOM	2578	C	LEU	A	331	-19.431	-4.988	24.012	1.00	26.84	C
ATOM	2579	O	LEU	A	331	-19.549	-3.859	24.503	1.00	30.55	O
ATOM	2580	CB	LEU	A	331	-17.900	-6.919	24.093	1.00	21.01	C
ATOM	2581	CG	LEU	A	331	-16.415	-6.566	24.178	1.00	21.98	C
ATOM	2582	CD1	LEU	A	331	-16.125	-5.467	25.205	1.00	18.67	C
ATOM	2583	CD2	LEU	A	331	-15.674	-7.848	24.537	1.00	19.61	C
ATOM	2584	N	TYR	A	332	-19.930	-5.338	22.816	1.00	27.17	N
ATOM	2585	CA	TYR	A	332	-20.406	-4.377	21.794	1.00	24.12	C
ATOM	2586	C	TYR	A	332	-21.396	-3.374	22.322	1.00	22.23	C
ATOM	2587	O	TYR	A	332	-21.229	-2.187	22.105	1.00	22.76	O
ATOM	2588	CB	TYR	A	332	-21.021	-5.134	20.599	1.00	22.53	C
ATOM	2589	CG	TYR	A	332	-22.199	-4.494	19.884	1.00	16.65	C
ATOM	2590	CD1	TYR	A	332	-22.123	-3.225	19.365	1.00	17.03	C
ATOM	2591	CD2	TYR	A	332	-23.319	-5.242	19.579	1.00	15.91	C
ATOM	2592	CE1	TYR	A	332	-23.132	-2.727	18.564	1.00	15.87	C
ATOM	2593	CE2	TYR	A	332	-24.309	-4.760	18.779	1.00	12.78	C
ATOM	2594	CZ	TYR	A	332	-24.219	-3.503	18.270	1.00	12.74	C
ATOM	2595	OH	TYR	A	332	-25.211	-3.032	17.443	1.00	11.75	O
ATOM	2596	N	GLU	A	333	-22.462	-3.858	22.947	1.00	21.11	N
ATOM	2597	CA	GLU	A	333	-23.480	-2.982	23.516	1.00	19.69	C
ATOM	2598	C	GLU	A	333	-22.973	-2.225	24.753	1.00	19.94	C
ATOM	2599	O	GLU	A	333	-23.239	-1.039	24.920	1.00	21.44	O
ATOM	2600	CB	GLU	A	333	-24.722	-3.791	23.854	1.00	17.19	C
ATOM	2601	CG	GLU	A	333	-25.676	-3.903	22.700	1.00	13.27	C
ATOM	2602	CD	GLU	A	333	-26.462	-2.640	22.499	1.00	16.80	C
ATOM	2603	OE1	GLU	A	333	-26.673	-1.903	23.474	1.00	17.89	O
ATOM	2604	OE2	GLU	A	333	-26.870	-2.358	21.358	1.00	21.21	O1-
ATOM	2605	N	TYR	A	334	-22.108	-2.846	25.535	1.00	17.50	N
ATOM	2606	CA	TYR	A	334	-21.473	-2.102	26.591	1.00	16.87	C
ATOM	2607	C	TYR	A	334	-20.552	-1.074	25.929	1.00	17.20	C
ATOM	2608	O	TYR	A	334	-20.643	0.126	26.220	1.00	15.06	O
ATOM	2609	CB	TYR	A	334	-20.694	-3.049	27.511	1.00	19.62	C
ATOM	2610	CG	TYR	A	334	-20.693	-2.600	28.969	1.00	21.56	C
ATOM	2611	CD1	TYR	A	334	-20.828	-1.258	29.304	1.00	23.27	C
ATOM	2612	CD2	TYR	A	334	-20.546	-3.503	29.994	1.00	19.88	C
ATOM	2613	CE1	TYR	A	334	-20.808	-0.840	30.609	1.00	21.45	C
ATOM	2614	CE2	TYR	A	334	-20.523	-3.084	31.297	1.00	21.56	C
ATOM	2615	CZ	TYR	A	334	-20.643	-1.750	31.594	1.00	21.82	C
ATOM	2616	OH	TYR	A	334	-20.475	-1.288	32.873	1.00	24.16	O
ATOM	2617	N	ALA	A	335	-19.934	-1.510	24.833	1.00	16.03	N
ATOM	2618	CA	ALA	A	335	-18.944	-0.733	24.108	1.00	15.10	C
ATOM	2619	C	ALA	A	335	-19.581	0.539	23.577	1.00	16.13	C
ATOM	2620	O	ALA	A	335	-19.116	1.638	23.861	1.00	17.41	O
ATOM	2621	CB	ALA	A	335	-18.392	-1.555	22.966	1.00	13.10	C
ATOM	2622	N	ARG	A	336	-20.753	0.374	22.974	1.00	16.93	N
ATOM	2623	CA	ARG	A	336	-21.547	1.458	22.418	1.00	16.89	C
ATOM	2624	C	ARG	A	336	-21.658	2.712	23.290	1.00	18.08	C

ATOM	2625	O	ARG	A	336	-21.482	3.820	22.803	1.00	16.00	O
ATOM	2626	CB	ARG	A	336	-22.946	0.940	22.127	1.00	17.05	C
ATOM	2627	CG	ARG	A	336	-23.108	0.324	20.776	1.00	16.01	C
ATOM	2628	CD	ARG	A	336	-24.129	1.117	19.996	1.00	18.77	C
ATOM	2629	NE	ARG	A	336	-25.334	0.350	19.735	1.00	23.35	N
ATOM	2630	CZ	ARG	A	336	-25.554	-0.337	18.613	1.00	26.57	C
ATOM	2631	NH1	ARG	A	336	-24.595	-0.458	17.700	1.00	24.51	N1+
ATOM	2632	NH2	ARG	A	336	-26.743	-0.891	18.390	1.00	27.93	N
ATOM	2633	N	ARG	A	337	-22.052	2.543	24.548	1.00	21.47	N
ATOM	2634	CA	ARG	A	337	-22.449	3.689	25.383	1.00	24.30	C
ATOM	2635	C	ARG	A	337	-21.309	4.239	26.248	1.00	23.58	C
ATOM	2636	O	ARG	A	337	-21.539	4.923	27.280	1.00	21.32	O
ATOM	2637	CB	ARG	A	337	-23.657	3.342	26.285	1.00	27.68	C
ATOM	2638	CG	ARG	A	337	-24.089	1.856	26.376	1.00	29.06	C
ATOM	2639	CD	ARG	A	337	-25.460	1.731	27.076	1.00	29.77	C
ATOM	2640	NE	ARG	A	337	-26.418	0.886	26.353	1.00	28.59	N
ATOM	2641	CZ	ARG	A	337	-26.845	1.102	25.108	1.00	28.23	C
ATOM	2642	NH1	ARG	A	337	-26.324	2.083	24.382	1.00	27.06	N1+
ATOM	2643	NH2	ARG	A	337	-27.795	0.324	24.582	1.00	24.49	N
ATOM	2644	N	HIS	A	338	-20.082	3.889	25.864	1.00	21.05	N
ATOM	2645	CA	HIS	A	338	-18.922	4.164	26.703	1.00	18.37	C
ATOM	2646	C	HIS	A	338	-17.702	4.574	25.901	1.00	13.99	C
ATOM	2647	O	HIS	A	338	-16.611	4.073	26.118	1.00	11.40	O
ATOM	2648	CB	HIS	A	338	-18.610	2.954	27.576	1.00	19.06	C
ATOM	2649	CG	HIS	A	338	-19.551	2.791	28.728	1.00	21.75	C
ATOM	2650	CD2	HIS	A	338	-19.937	1.685	29.406	1.00	21.31	C
ATOM	2651	ND1	HIS	A	338	-20.238	3.847	29.288	1.00	22.04	N
ATOM	2652	CE1	HIS	A	338	-21.007	3.394	30.267	1.00	25.17	C
ATOM	2653	NE2	HIS	A	338	-20.844	2.087	30.358	1.00	21.03	N
ATOM	2654	N	PRO	A	339	-17.826	5.673	25.169	1.00	10.97	N
ATOM	2655	CA	PRO	A	339	-16.623	6.285	24.652	1.00	12.13	C
ATOM	2656	C	PRO	A	339	-15.808	6.864	25.780	1.00	14.82	C
ATOM	2657	O	PRO	A	339	-14.743	7.430	25.543	1.00	16.89	O
ATOM	2658	CB	PRO	A	339	-17.148	7.379	23.719	1.00	12.95	C
ATOM	2659	CG	PRO	A	339	-18.636	7.237	23.705	1.00	11.47	C
ATOM	2660	CD	PRO	A	339	-18.985	6.546	24.970	1.00	12.68	C
ATOM	2661	N	ASP	A	340	-16.335	6.799	26.998	1.00	16.39	N
ATOM	2662	CA	ASP	A	340	-15.676	7.456	28.120	1.00	17.93	C
ATOM	2663	C	ASP	A	340	-14.888	6.494	29.012	1.00	16.22	C
ATOM	2664	O	ASP	A	340	-14.163	6.926	29.905	1.00	13.33	O
ATOM	2665	CB	ASP	A	340	-16.689	8.324	28.916	1.00	23.67	C
ATOM	2666	CG	ASP	A	340	-17.750	7.512	29.671	1.00	28.01	C
ATOM	2667	OD1	ASP	A	340	-18.805	7.174	29.077	1.00	27.93	O
ATOM	2668	OD2	ASP	A	340	-17.630	7.403	30.917	1.00	31.19	O1-
ATOM	2669	N	TYR	A	341	-14.848	5.230	28.586	1.00	16.78	N
ATOM	2670	CA	TYR	A	341	-14.063	4.179	29.225	1.00	16.62	C
ATOM	2671	C	TYR	A	341	-13.182	3.548	28.151	1.00	18.04	C
ATOM	2672	O	TYR	A	341	-13.662	3.157	27.095	1.00	19.19	O
ATOM	2673	CB	TYR	A	341	-14.956	3.059	29.782	1.00	17.89	C
ATOM	2674	CG	TYR	A	341	-15.863	3.378	30.973	1.00	17.57	C
ATOM	2675	CD1	TYR	A	341	-15.606	4.437	31.821	1.00	16.92	C
ATOM	2676	CD2	TYR	A	341	-16.915	2.536	31.290	1.00	15.97	C
ATOM	2677	CE1	TYR	A	341	-16.361	4.638	32.959	1.00	20.41	C
ATOM	2678	CE2	TYR	A	341	-17.666	2.723	32.406	1.00	18.32	C
ATOM	2679	CZ	TYR	A	341	-17.393	3.772	33.260	1.00	20.96	C
ATOM	2680	OH	TYR	A	341	-18.120	3.905	34.452	1.00	18.90	O
ATOM	2681	N	SER	A	342	-11.972	3.194	28.546	1.00	19.93	N
ATOM	2682	CA	SER	A	342	-10.979	2.592	27.668	1.00	17.81	C
ATOM	2683	C	SER	A	342	-11.334	1.153	27.386	1.00	17.13	C
ATOM	2684	O	SER	A	342	-11.554	0.401	28.331	1.00	17.80	O
ATOM	2685	CB	SER	A	342	-9.643	2.595	28.389	1.00	19.87	C
ATOM	2686	OG	SER	A	342	-9.820	2.057	29.693	1.00	17.44	O
ATOM	2687	N	VAL	A	343	-11.037	0.712	26.168	1.00	16.67	N
ATOM	2688	CA	VAL	A	343	-11.195	-0.679	25.788	1.00	15.06	C
ATOM	2689	C	VAL	A	343	-10.570	-1.594	26.815	1.00	15.29	C
ATOM	2690	O	VAL	A	343	-11.284	-2.267	27.538	1.00	17.32	O
ATOM	2691	CB	VAL	A	343	-10.601	-0.964	24.386	1.00	17.69	C
ATOM	2692	CG1	VAL	A	343	-9.194	-0.425	24.270	1.00	17.11	C
ATOM	2693	CG2	VAL	A	343	-10.638	-2.460	24.091	1.00	19.44	C
ATOM	2694	N	VAL	A	344	-9.273	-1.446	27.044	1.00	14.96	N
ATOM	2695	CA	VAL	A	344	-8.571	-2.281	28.013	1.00	12.81	C

ATOM	2696	C	VAL	A	344	-9.315	-2.430	29.334	1.00	14.93	C
ATOM	2697	O	VAL	A	344	-9.358	-3.522	29.872	1.00	16.62	O
ATOM	2698	CB	VAL	A	344	-7.169	-1.751	28.262	1.00	9.56	C
ATOM	2699	CG1	VAL	A	344	-6.537	-2.427	29.439	1.00	11.59	C
ATOM	2700	CG2	VAL	A	344	-6.344	-1.992	27.048	1.00	15.07	C
ATOM	2701	N	LEU	A	345	-10.048	-1.400	29.763	1.00	16.26	N
ATOM	2702	CA	LEU	A	345	-10.925	-1.526	30.942	1.00	17.05	C
ATOM	2703	C	LEU	A	345	-12.105	-2.415	30.592	1.00	15.69	C
ATOM	2704	O	LEU	A	345	-12.294	-3.481	31.172	1.00	14.48	O
ATOM	2705	CB	LEU	A	345	-11.459	-0.159	31.392	1.00	18.45	C
ATOM	2706	CG	LEU	A	345	-11.962	0.060	32.830	1.00	18.68	C
ATOM	2707	CD1	LEU	A	345	-13.262	-0.629	33.058	1.00	17.13	C
ATOM	2708	CD2	LEU	A	345	-10.926	-0.419	33.841	1.00	21.35	C
ATOM	2709	N	LEU	A	346	-12.855	-1.992	29.588	1.00	14.21	N
ATOM	2710	CA	LEU	A	346	-14.109	-2.633	29.226	1.00	14.41	C
ATOM	2711	C	LEU	A	346	-13.900	-4.106	28.967	1.00	15.55	C
ATOM	2712	O	LEU	A	346	-14.832	-4.889	29.076	1.00	16.56	O
ATOM	2713	CB	LEU	A	346	-14.688	-1.981	27.970	1.00	14.22	C
ATOM	2714	CG	LEU	A	346	-16.004	-1.213	27.991	1.00	11.29	C
ATOM	2715	CD1	LEU	A	346	-16.066	-0.240	29.135	1.00	13.74	C
ATOM	2716	CD2	LEU	A	346	-16.105	-0.487	26.692	1.00	11.30	C
ATOM	2717	N	LEU	A	347	-12.680	-4.472	28.591	1.00	17.67	N
ATOM	2718	CA	LEU	A	347	-12.325	-5.868	28.316	1.00	18.46	C
ATOM	2719	C	LEU	A	347	-12.252	-6.655	29.618	1.00	18.38	C
ATOM	2720	O	LEU	A	347	-12.542	-7.844	29.626	1.00	18.38	O
ATOM	2721	CB	LEU	A	347	-10.977	-5.941	27.598	1.00	18.93	C
ATOM	2722	CG	LEU	A	347	-10.687	-7.030	26.566	1.00	18.83	C
ATOM	2723	CD1	LEU	A	347	-11.567	-8.246	26.778	1.00	17.43	C
ATOM	2724	CD2	LEU	A	347	-10.883	-6.449	25.188	1.00	17.31	C
ATOM	2725	N	ARG	A	348	-11.908	-5.966	30.710	1.00	18.37	N
ATOM	2726	CA	ARG	A	348	-12.082	-6.454	32.088	1.00	19.23	C
ATOM	2727	C	ARG	A	348	-13.543	-6.617	32.563	1.00	19.03	C
ATOM	2728	O	ARG	A	348	-13.821	-7.463	33.423	1.00	21.17	O
ATOM	2729	CB	ARG	A	348	-11.365	-5.526	33.060	1.00	17.92	C
ATOM	2730	CG	ARG	A	348	-9.954	-5.943	33.395	1.00	21.29	C
ATOM	2731	CD	ARG	A	348	-9.199	-4.790	34.054	1.00	22.78	C
ATOM	2732	NE	ARG	A	348	-7.997	-5.281	34.717	1.00	25.21	N
ATOM	2733	CZ	ARG	A	348	-7.661	-5.008	35.977	1.00	26.74	C
ATOM	2734	NH1	ARG	A	348	-8.245	-4.007	36.636	1.00	24.24	N1+
ATOM	2735	NH2	ARG	A	348	-6.631	-5.644	36.530	1.00	25.87	N
ATOM	2736	N	LEU	A	349	-14.437	-5.728	32.119	1.00	15.77	N
ATOM	2737	CA	LEU	A	349	-15.868	-5.894	32.346	1.00	11.96	C
ATOM	2738	C	LEU	A	349	-16.417	-7.004	31.453	1.00	14.75	C
ATOM	2739	O	LEU	A	349	-17.446	-7.619	31.748	1.00	16.02	O
ATOM	2740	CB	LEU	A	349	-16.599	-4.603	32.054	1.00	6.86	C
ATOM	2741	CG	LEU	A	349	-16.030	-3.328	32.671	1.00	12.17	C
ATOM	2742	CD1	LEU	A	349	-17.117	-2.246	32.667	1.00	14.15	C
ATOM	2743	CD2	LEU	A	349	-15.553	-3.568	34.090	1.00	10.52	C
ATOM	2744	N	ALA	A	350	-15.667	-7.344	30.416	1.00	15.21	N
ATOM	2745	CA	ALA	A	350	-16.061	-8.424	29.539	1.00	16.39	C
ATOM	2746	C	ALA	A	350	-15.410	-9.730	29.963	1.00	17.56	C
ATOM	2747	O	ALA	A	350	-15.616	-10.767	29.332	1.00	17.63	O
ATOM	2748	CB	ALA	A	350	-15.695	-8.084	28.116	1.00	17.35	C
ATOM	2749	N	LYS	A	351	-14.654	-9.688	31.057	1.00	19.16	N
ATOM	2750	CA	LYS	A	351	-14.267	-10.913	31.747	1.00	20.56	C
ATOM	2751	C	LYS	A	351	-14.763	-11.048	33.166	1.00	20.35	C
ATOM	2752	O	LYS	A	351	-14.523	-12.083	33.770	1.00	20.19	O
ATOM	2753	CB	LYS	A	351	-12.756	-11.122	31.726	1.00	23.48	C
ATOM	2754	CG	LYS	A	351	-12.300	-12.152	30.682	1.00	29.67	C
ATOM	2755	CD	LYS	A	351	-12.868	-11.815	29.274	1.00	33.17	C
ATOM	2756	CE	LYS	A	351	-11.936	-12.235	28.116	1.00	33.44	C
ATOM	2757	NZ	LYS	A	351	-12.007	-11.236	26.983	1.00	31.75	N1+
ATOM	2758	N	THR	A	352	-15.548	-10.079	33.651	1.00	22.45	N
ATOM	2759	CA	THR	A	352	-16.326	-10.254	34.892	1.00	25.02	C
ATOM	2760	C	THR	A	352	-17.850	-10.434	34.671	1.00	27.15	C
ATOM	2761	O	THR	A	352	-18.596	-10.768	35.590	1.00	28.15	O
ATOM	2762	CB	THR	A	352	-16.105	-9.093	35.854	1.00	25.24	C
ATOM	2763	CG2	THR	A	352	-16.302	-9.557	37.305	1.00	25.36	C
ATOM	2764	OG1	THR	A	352	-14.772	-8.583	35.690	1.00	27.53	O
ATOM	2765	N	TYR	A	353	-18.314	-10.227	33.443	1.00	28.56	N
ATOM	2766	CA	TYR	A	353	-19.436	-11.009	32.951	1.00	27.35	C

ATOM	2767	C	TYR	A	353	-18.988	-12.487	32.781	1.00	28.05	C
ATOM	2768	O	TYR	A	353	-19.141	-13.277	33.718	1.00	29.94	O
ATOM	2769	CB	TYR	A	353	-19.942	-10.427	31.629	1.00	25.44	C
ATOM	2770	CG	TYR	A	353	-21.447	-10.511	31.448	1.00	24.45	C
ATOM	2771	CD1	TYR	A	353	-22.327	-10.076	32.455	1.00	21.15	C
ATOM	2772	CD2	TYR	A	353	-21.991	-11.122	30.316	1.00	22.41	C
ATOM	2773	CE1	TYR	A	353	-23.705	-10.270	32.338	1.00	18.94	C
ATOM	2774	CE2	TYR	A	353	-23.364	-11.318	30.195	1.00	19.82	C
ATOM	2775	CZ	TYR	A	353	-24.208	-10.906	31.206	1.00	19.86	C
ATOM	2776	OH	TYR	A	353	-25.525	-11.262	31.124	1.00	18.86	O
ATOM	2777	N	GLU	A	354	-18.244	-12.794	31.714	1.00	25.58	N
ATOM	2778	CA	GLU	A	354	-17.941	-14.192	31.332	1.00	24.34	C
ATOM	2779	C	GLU	A	354	-17.618	-15.178	32.445	1.00	23.15	C
ATOM	2780	O	GLU	A	354	-17.902	-16.361	32.315	1.00	21.79	O
ATOM	2781	CB	GLU	A	354	-16.774	-14.261	30.346	1.00	25.14	C
ATOM	2782	CG	GLU	A	354	-16.485	-15.694	29.867	1.00	24.30	C
ATOM	2783	CD	GLU	A	354	-15.011	-16.006	29.672	1.00	23.93	C
ATOM	2784	OE1	GLU	A	354	-14.145	-15.338	30.288	1.00	22.57	O
ATOM	2785	OE2	GLU	A	354	-14.727	-16.952	28.905	1.00	22.72	O1-
ATOM	2786	N	THR	A	355	-16.746	-14.776	33.353	1.00	22.89	N
ATOM	2787	CA	THR	A	355	-16.424	-15.652	34.455	1.00	21.39	C
ATOM	2788	C	THR	A	355	-17.689	-15.821	35.259	1.00	23.76	C
ATOM	2789	O	THR	A	355	-18.292	-16.908	35.252	1.00	24.10	O
ATOM	2790	CB	THR	A	355	-15.414	-15.041	35.375	1.00	22.64	C
ATOM	2791	CG2	THR	A	355	-14.930	-16.101	36.358	1.00	23.56	C
ATOM	2792	OG1	THR	A	355	-14.333	-14.484	34.609	1.00	23.91	O
ATOM	2793	N	THR	A	356	-18.140	-14.704	35.852	1.00	23.40	N
ATOM	2794	CA	THR	A	356	-19.244	-14.695	36.812	1.00	23.16	C
ATOM	2795	C	THR	A	356	-20.470	-15.421	36.293	1.00	22.64	C
ATOM	2796	O	THR	A	356	-20.910	-16.389	36.901	1.00	24.94	O
ATOM	2797	CB	THR	A	356	-19.636	-13.257	37.216	1.00	24.04	C
ATOM	2798	CG2	THR	A	356	-21.004	-13.225	37.905	1.00	21.12	C
ATOM	2799	OG1	THR	A	356	-18.647	-12.740	38.121	1.00	28.79	O
ATOM	2800	N	LEU	A	357	-20.936	-15.060	35.105	1.00	19.87	N
ATOM	2801	CA	LEU	A	357	-22.092	-15.724	34.542	1.00	16.07	C
ATOM	2802	C	LEU	A	357	-21.893	-17.215	34.408	1.00	16.68	C
ATOM	2803	O	LEU	A	357	-22.844	-17.937	34.102	1.00	16.65	O
ATOM	2804	CB	LEU	A	357	-22.428	-15.140	33.189	1.00	13.80	C
ATOM	2805	CG	LEU	A	357	-23.662	-14.274	33.305	1.00	14.12	C
ATOM	2806	CD1	LEU	A	357	-23.278	-12.964	33.979	1.00	11.35	C
ATOM	2807	CD2	LEU	A	357	-24.275	-14.076	31.936	1.00	9.43	C
ATOM	2808	N	GLU	A	358	-20.639	-17.653	34.510	1.00	18.54	N
ATOM	2809	CA	GLU	A	358	-20.306	-19.077	34.509	1.00	22.18	C
ATOM	2810	C	GLU	A	358	-20.175	-19.565	35.932	1.00	23.29	C
ATOM	2811	O	GLU	A	358	-20.495	-20.722	36.210	1.00	25.03	O
ATOM	2812	CB	GLU	A	358	-19.004	-19.353	33.731	1.00	25.37	C
ATOM	2813	CG	GLU	A	358	-19.208	-20.016	32.329	1.00	29.81	C
ATOM	2814	CD	GLU	A	358	-19.717	-19.054	31.220	1.00	30.46	C
ATOM	2815	OE1	GLU	A	358	-18.859	-18.380	30.586	1.00	30.40	O
ATOM	2816	OE2	GLU	A	358	-20.946	-19.046	30.925	1.00	25.21	O1-
ATOM	2817	N	LYS	A	359	-19.818	-18.642	36.833	1.00	22.28	N
ATOM	2818	CA	LYS	A	359	-19.902	-18.823	38.294	1.00	21.07	C
ATOM	2819	C	LYS	A	359	-21.329	-19.097	38.762	1.00	21.42	C
ATOM	2820	O	LYS	A	359	-21.543	-19.518	39.903	1.00	21.98	O
ATOM	2821	CB	LYS	A	359	-19.409	-17.562	39.021	1.00	20.11	C
ATOM	2822	CG	LYS	A	359	-18.134	-17.700	39.848	1.00	22.37	C
ATOM	2823	CD	LYS	A	359	-17.703	-19.159	40.055	1.00	24.00	C
ATOM	2824	CE	LYS	A	359	-16.830	-19.349	41.307	1.00	24.54	C
ATOM	2825	NZ	LYS	A	359	-17.624	-19.380	42.606	1.00	21.49	N1+
ATOM	2826	N	CYS	A	360	-22.304	-18.705	37.946	1.00	22.87	N
ATOM	2827	CA	CYS	A	360	-23.709	-18.847	38.318	1.00	24.14	C
ATOM	2828	C	CYS	A	360	-24.710	-18.775	37.158	1.00	23.71	C
ATOM	2829	O	CYS	A	360	-25.613	-17.929	37.133	1.00	24.52	O
ATOM	2830	CB	CYS	A	360	-24.057	-17.808	39.374	1.00	24.78	C
ATOM	2831	SG	CYS	A	360	-22.748	-16.563	39.608	1.00	26.85	S
ATOM	2832	N	CYS	A	361	-24.405	-19.527	36.113	1.00	22.64	N
ATOM	2833	CA	CYS	A	361	-25.419	-20.138	35.292	1.00	22.37	C
ATOM	2834	C	CYS	A	361	-25.485	-21.605	35.702	1.00	23.29	C
ATOM	2835	O	CYS	A	361	-26.339	-22.359	35.231	1.00	23.57	O
ATOM	2836	CB	CYS	A	361	-25.025	-20.055	33.828	1.00	23.14	C
ATOM	2837	SG	CYS	A	361	-26.368	-19.332	32.880	1.00	26.83	S

ATOM	2838	N	ALA	A	362	-24.508	-22.030	36.497	1.00	23.59	N
ATOM	2839	CA	ALA	A	362	-24.434	-23.405	36.944	1.00	25.12	C
ATOM	2840	C	ALA	A	362	-25.368	-23.670	38.107	1.00	25.80	C
ATOM	2841	O	ALA	A	362	-26.545	-23.951	37.901	1.00	26.67	O
ATOM	2842	CB	ALA	A	362	-22.999	-23.748	37.342	1.00	27.30	C
ATOM	2843	N	ALA	A	363	-24.858	-23.502	39.326	1.00	23.91	N
ATOM	2844	CA	ALA	A	363	-25.445	-24.155	40.488	1.00	26.21	C
ATOM	2845	C	ALA	A	363	-26.359	-23.304	41.386	1.00	26.42	C
ATOM	2846	O	ALA	A	363	-26.234	-22.069	41.407	1.00	24.96	O
ATOM	2847	CB	ALA	A	363	-24.331	-24.804	41.343	1.00	25.36	C
ATOM	2848	N	ALA	A	364	-27.415	-23.948	41.912	1.00	28.14	N
ATOM	2849	CA	ALA	A	364	-28.010	-23.673	43.236	1.00	31.01	C
ATOM	2850	C	ALA	A	364	-28.676	-22.323	43.366	1.00	32.95	C
ATOM	2851	O	ALA	A	364	-28.424	-21.582	44.343	1.00	33.01	O
ATOM	2852	CB	ALA	A	364	-26.941	-23.792	44.302	1.00	32.09	C
ATOM	2853	N	ASP	A	365	-29.630	-22.080	42.470	1.00	33.49	N
ATOM	2854	CA	ASP	A	365	-30.065	-20.719	42.092	1.00	32.31	C
ATOM	2855	C	ASP	A	365	-30.308	-19.789	43.290	1.00	34.06	C
ATOM	2856	O	ASP	A	365	-30.266	-20.216	44.442	1.00	35.19	O
ATOM	2857	CB	ASP	A	365	-31.305	-20.839	41.165	1.00	30.17	C
ATOM	2858	CG	ASP	A	365	-32.215	-21.973	41.556	1.00	27.56	C
ATOM	2859	OD1	ASP	A	365	-32.811	-21.879	42.644	1.00	25.00	O
ATOM	2860	OD2	ASP	A	365	-32.379	-22.899	40.741	1.00	24.35	O1-
ATOM	2861	N	PRO	A	366	-30.401	-18.469	43.078	1.00	34.76	N
ATOM	2862	CA	PRO	A	366	-31.123	-17.957	41.922	1.00	34.85	C
ATOM	2863	C	PRO	A	366	-30.281	-16.923	41.199	1.00	35.81	C
ATOM	2864	O	PRO	A	366	-29.071	-17.095	41.054	1.00	36.75	O
ATOM	2865	CB	PRO	A	366	-32.402	-17.379	42.539	1.00	33.58	C
ATOM	2866	CG	PRO	A	366	-31.998	-16.969	43.986	1.00	34.17	C
ATOM	2867	CD	PRO	A	366	-30.585	-17.580	44.243	1.00	35.22	C
ATOM	2868	N	HIS	A	367	-30.879	-15.760	40.952	1.00	35.99	N
ATOM	2869	CA	HIS	A	367	-30.318	-14.767	40.058	1.00	32.68	C
ATOM	2870	C	HIS	A	367	-29.370	-13.770	40.677	1.00	32.19	C
ATOM	2871	O	HIS	A	367	-28.438	-13.300	40.019	1.00	32.60	O
ATOM	2872	CB	HIS	A	367	-31.447	-14.017	39.383	1.00	30.02	C
ATOM	2873	CG	HIS	A	367	-31.860	-14.638	38.108	1.00	25.99	C
ATOM	2874	CD2	HIS	A	367	-32.718	-14.223	37.152	1.00	26.12	C
ATOM	2875	ND1	HIS	A	367	-31.248	-15.773	37.620	1.00	25.25	N
ATOM	2876	CE1	HIS	A	367	-31.706	-16.026	36.408	1.00	27.08	C
ATOM	2877	NE2	HIS	A	367	-32.598	-15.099	36.097	1.00	29.00	N
ATOM	2878	N	GLU	A	368	-29.538	-13.526	41.962	1.00	30.39	N
ATOM	2879	CA	GLU	A	368	-28.843	-12.426	42.577	1.00	29.24	C
ATOM	2880	C	GLU	A	368	-27.331	-12.453	42.287	1.00	28.13	C
ATOM	2881	O	GLU	A	368	-26.729	-11.384	42.163	1.00	26.88	O
ATOM	2882	CB	GLU	A	368	-29.136	-12.413	44.090	1.00	29.55	C
ATOM	2883	CG	GLU	A	368	-30.634	-12.566	44.422	1.00	25.73	C
ATOM	2884	CD	GLU	A	368	-31.265	-11.300	44.974	1.00	24.58	C
ATOM	2885	OE1	GLU	A	368	-30.521	-10.338	45.266	1.00	25.16	O
ATOM	2886	OE2	GLU	A	368	-32.498	-11.296	45.176	1.00	21.06	O1-
ATOM	2887	N	CYS	A	369	-26.758	-13.638	42.021	1.00	26.26	N
ATOM	2888	CA	CYS	A	369	-25.313	-13.757	41.759	1.00	24.90	C
ATOM	2889	C	CYS	A	369	-24.874	-12.701	40.778	1.00	25.23	C
ATOM	2890	O	CYS	A	369	-23.911	-12.003	41.032	1.00	25.76	O
ATOM	2891	CB	CYS	A	369	-24.941	-15.093	41.136	1.00	25.85	C
ATOM	2892	SG	CYS	A	369	-23.840	-14.850	39.683	1.00	28.33	S
ATOM	2893	N	TYR	A	370	-25.488	-12.721	39.593	1.00	24.71	N
ATOM	2894	CA	TYR	A	370	-25.245	-11.722	38.563	1.00	23.51	C
ATOM	2895	C	TYR	A	370	-26.029	-10.420	38.757	1.00	24.62	C
ATOM	2896	O	TYR	A	370	-25.953	-9.523	37.906	1.00	23.98	O
ATOM	2897	CB	TYR	A	370	-25.537	-12.308	37.178	1.00	24.52	C
ATOM	2898	CG	TYR	A	370	-26.989	-12.560	36.798	1.00	22.90	C
ATOM	2899	CD1	TYR	A	370	-27.771	-11.529	36.277	1.00	24.94	C
ATOM	2900	CD2	TYR	A	370	-27.445	-13.861	36.605	1.00	22.80	C
ATOM	2901	CE1	TYR	A	370	-28.942	-11.789	35.548	1.00	23.26	C
ATOM	2902	CE2	TYR	A	370	-28.605	-14.126	35.880	1.00	21.68	C
ATOM	2903	CZ	TYR	A	370	-29.347	-13.085	35.357	1.00	22.31	C
ATOM	2904	OH	TYR	A	370	-30.530	-13.345	34.705	1.00	19.63	O
ATOM	2905	N	ALA	A	371	-26.806	-10.341	39.843	1.00	22.53	N
ATOM	2906	CA	ALA	A	371	-27.517	-9.121	40.212	1.00	20.95	C
ATOM	2907	C	ALA	A	371	-26.534	-8.002	40.483	1.00	21.22	C
ATOM	2908	O	ALA	A	371	-25.767	-8.032	41.452	1.00	18.20	O

ATOM	2909	CB	ALA	A	371	-28.392	-9.347	41.437	1.00	20.29	C
ATOM	2910	N	LYS	A	372	-26.618	-6.979	39.644	1.00	23.07	N
ATOM	2911	CA	LYS	A	372	-25.638	-5.897	39.648	1.00	26.70	C
ATOM	2912	C	LYS	A	372	-24.221	-6.384	39.978	1.00	28.46	C
ATOM	2913	O	LYS	A	372	-23.624	-5.993	41.000	1.00	26.84	O
ATOM	2914	CB	LYS	A	372	-26.041	-4.787	40.619	1.00	25.91	C
ATOM	2915	CG	LYS	A	372	-27.377	-4.140	40.291	1.00	25.48	C
ATOM	2916	CD	LYS	A	372	-27.886	-3.362	41.489	1.00	21.87	C
ATOM	2917	CE	LYS	A	372	-26.866	-2.361	41.922	1.00	18.47	C
ATOM	2918	NZ	LYS	A	372	-26.407	-1.618	40.728	1.00	20.65	N1+
ATOM	2919	N	VAL	A	373	-23.710	-7.262	39.109	1.00	27.77	N
ATOM	2920	CA	VAL	A	373	-22.311	-7.224	38.739	1.00	24.92	C
ATOM	2921	C	VAL	A	373	-21.958	-5.773	38.482	1.00	24.34	C
ATOM	2922	O	VAL	A	373	-20.982	-5.276	39.007	1.00	23.37	O
ATOM	2923	CB	VAL	A	373	-22.036	-8.008	37.459	1.00	25.87	C
ATOM	2924	CG1	VAL	A	373	-21.594	-9.423	37.811	1.00	27.81	C
ATOM	2925	CG2	VAL	A	373	-23.271	-8.017	36.564	1.00	25.54	C
ATOM	2926	N	PHE	A	374	-22.878	-5.047	37.856	1.00	25.35	N
ATOM	2927	CA	PHE	A	374	-22.738	-3.597	37.666	1.00	25.95	C
ATOM	2928	C	PHE	A	374	-22.261	-2.928	38.950	1.00	26.20	C
ATOM	2929	O	PHE	A	374	-21.593	-1.880	38.921	1.00	21.77	O
ATOM	2930	CB	PHE	A	374	-24.083	-2.995	37.222	1.00	25.29	C
ATOM	2931	CG	PHE	A	374	-24.338	-3.095	35.744	1.00	24.61	C
ATOM	2932	CD1	PHE	A	374	-23.850	-4.157	35.010	1.00	25.83	C
ATOM	2933	CD2	PHE	A	374	-25.029	-2.096	35.083	1.00	27.32	C
ATOM	2934	CE1	PHE	A	374	-24.043	-4.218	33.648	1.00	27.69	C
ATOM	2935	CE2	PHE	A	374	-25.224	-2.145	33.714	1.00	26.77	C
ATOM	2936	CZ	PHE	A	374	-24.731	-3.208	32.999	1.00	27.96	C
ATOM	2937	N	ASP	A	375	-22.562	-3.601	40.064	1.00	29.26	N
ATOM	2938	CA	ASP	A	375	-22.212	-3.148	41.409	1.00	31.59	C
ATOM	2939	C	ASP	A	375	-21.374	-4.155	42.225	1.00	29.82	C
ATOM	2940	O	ASP	A	375	-21.614	-4.358	43.415	1.00	29.59	O
ATOM	2941	CB	ASP	A	375	-23.477	-2.747	42.176	1.00	31.39	C
ATOM	2942	CG	ASP	A	375	-23.954	-1.340	41.817	1.00	32.35	C
ATOM	2943	OD1	ASP	A	375	-23.865	-0.935	40.627	1.00	30.78	O
ATOM	2944	OD2	ASP	A	375	-24.511	-0.658	42.715	1.00	36.30	O1-
ATOM	2945	N	GLU	A	376	-20.457	-4.836	41.539	1.00	28.50	N
ATOM	2946	CA	GLU	A	376	-19.115	-5.035	42.053	1.00	26.94	C
ATOM	2947	C	GLU	A	376	-18.043	-5.009	40.962	1.00	26.28	C
ATOM	2948	O	GLU	A	376	-16.887	-5.333	41.245	1.00	28.07	O
ATOM	2949	CB	GLU	A	376	-19.002	-6.334	42.848	1.00	29.11	C
ATOM	2950	CG	GLU	A	376	-19.509	-7.591	42.165	1.00	29.86	C
ATOM	2951	CD	GLU	A	376	-18.961	-7.787	40.769	1.00	28.06	C
ATOM	2952	OE1	GLU	A	376	-17.736	-7.935	40.608	1.00	29.85	O
ATOM	2953	OE2	GLU	A	376	-19.768	-7.812	39.828	1.00	27.54	O1-
ATOM	2954	N	PHE	A	377	-18.435	-4.748	39.709	1.00	21.99	N
ATOM	2955	CA	PHE	A	377	-17.479	-4.330	38.674	1.00	17.15	C
ATOM	2956	C	PHE	A	377	-16.712	-3.219	39.354	1.00	17.60	C
ATOM	2957	O	PHE	A	377	-15.582	-3.419	39.769	1.00	18.80	O
ATOM	2958	CB	PHE	A	377	-18.158	-3.679	37.448	1.00	14.09	C
ATOM	2959	CG	PHE	A	377	-18.727	-4.640	36.433	1.00	5.40	C
ATOM	2960	CD1	PHE	A	377	-18.294	-5.932	36.335	1.00	3.20	C
ATOM	2961	CD2	PHE	A	377	-19.749	-4.233	35.616	1.00	2.00	C
ATOM	2962	CE1	PHE	A	377	-18.883	-6.791	35.456	1.00	2.00	C
ATOM	2963	CE2	PHE	A	377	-20.325	-5.088	34.742	1.00	2.00	C
ATOM	2964	CZ	PHE	A	377	-19.896	-6.362	34.666	1.00	2.00	C
ATOM	2965	N	LYS	A	378	-17.484	-2.219	39.775	1.00	17.81	N
ATOM	2966	CA	LYS	A	378	-17.005	-0.869	40.084	1.00	17.26	C
ATOM	2967	C	LYS	A	378	-15.683	-0.699	40.831	1.00	15.51	C
ATOM	2968	O	LYS	A	378	-15.089	0.362	40.777	1.00	14.50	O
ATOM	2969	CB	LYS	A	378	-18.106	-0.082	40.813	1.00	17.88	C
ATOM	2970	CG	LYS	A	378	-17.952	1.453	40.765	1.00	18.67	C
ATOM	2971	CD	LYS	A	378	-19.143	2.216	41.408	1.00	16.76	C
ATOM	2972	CE	LYS	A	378	-19.247	2.011	42.921	1.00	15.54	C
ATOM	2973	NZ	LYS	A	378	-19.884	0.728	43.329	1.00	9.93	N1+
ATOM	2974	N	PRO	A	379	-15.161	-1.749	41.468	1.00	15.24	N
ATOM	2975	CA	PRO	A	379	-13.732	-1.558	41.696	1.00	17.61	C
ATOM	2976	C	PRO	A	379	-12.965	-1.316	40.391	1.00	19.67	C
ATOM	2977	O	PRO	A	379	-12.378	-0.234	40.207	1.00	20.74	O
ATOM	2978	CB	PRO	A	379	-13.302	-2.852	42.408	1.00	17.69	C
ATOM	2979	CG	PRO	A	379	-14.565	-3.698	42.537	1.00	15.99	C

ATOM	2980	CD	PRO	A	379	-15.707	-2.740	42.404	1.00	15.75	C
ATOM	2981	N	LEU	A	380	-13.078	-2.261	39.450	1.00	18.64	N
ATOM	2982	CA	LEU	A	380	-12.334	-2.227	38.183	1.00	16.78	C
ATOM	2983	C	LEU	A	380	-12.899	-1.233	37.170	1.00	16.37	C
ATOM	2984	O	LEU	A	380	-13.224	-1.618	36.052	1.00	15.89	O
ATOM	2985	CB	LEU	A	380	-12.274	-3.625	37.545	1.00	12.95	C
ATOM	2986	CG	LEU	A	380	-13.247	-4.733	37.928	1.00	11.61	C
ATOM	2987	CD1	LEU	A	380	-13.959	-5.227	36.703	1.00	10.69	C
ATOM	2988	CD2	LEU	A	380	-12.504	-5.870	38.586	1.00	10.18	C
ATOM	2989	N	VAL	A	381	-13.112	0.004	37.626	1.00	16.46	N
ATOM	2990	CA	VAL	A	381	-13.610	1.151	36.844	1.00	16.90	C
ATOM	2991	C	VAL	A	381	-13.242	2.411	37.648	1.00	17.54	C
ATOM	2992	O	VAL	A	381	-13.279	3.526	37.143	1.00	18.24	O
ATOM	2993	CB	VAL	A	381	-15.167	1.160	36.674	1.00	16.00	C
ATOM	2994	CG1	VAL	A	381	-15.587	2.360	35.866	1.00	15.15	C
ATOM	2995	CG2	VAL	A	381	-15.668	-0.096	35.995	1.00	15.14	C
ATOM	2996	N	GLU	A	382	-12.936	2.228	38.926	1.00	19.02	N
ATOM	2997	CA	GLU	A	382	-12.424	3.318	39.744	1.00	20.65	C
ATOM	2998	C	GLU	A	382	-10.913	3.520	39.525	1.00	19.24	C
ATOM	2999	O	GLU	A	382	-10.503	4.596	39.114	1.00	18.63	O
ATOM	3000	CB	GLU	A	382	-12.740	3.080	41.245	1.00	24.33	C
ATOM	3001	CG	GLU	A	382	-14.261	3.175	41.666	1.00	22.93	C
ATOM	3002	CD	GLU	A	382	-14.712	4.589	42.012	1.00	23.13	C
ATOM	3003	OE1	GLU	A	382	-13.975	5.273	42.751	1.00	26.43	O
ATOM	3004	OE2	GLU	A	382	-15.776	5.038	41.527	1.00	21.00	O1-
ATOM	3005	N	GLU	A	383	-10.115	2.456	39.602	1.00	20.27	N
ATOM	3006	CA	GLU	A	383	-8.643	2.609	39.553	1.00	20.93	C
ATOM	3007	C	GLU	A	383	-8.048	3.427	38.400	1.00	17.88	C
ATOM	3008	O	GLU	A	383	-7.189	4.253	38.640	1.00	18.41	O
ATOM	3009	CB	GLU	A	383	-7.916	1.246	39.643	1.00	24.93	C
ATOM	3010	CG	GLU	A	383	-6.405	1.261	39.272	1.00	22.82	C
ATOM	3011	CD	GLU	A	383	-5.485	1.591	40.440	1.00	22.48	C
ATOM	3012	OE1	GLU	A	383	-5.574	2.732	40.956	1.00	21.74	O
ATOM	3013	OE2	GLU	A	383	-4.621	0.737	40.781	1.00	19.05	O1-
ATOM	3014	N	PRO	A	384	-8.487	3.215	37.153	1.00	14.01	N
ATOM	3015	CA	PRO	A	384	-8.206	4.228	36.135	1.00	15.62	C
ATOM	3016	C	PRO	A	384	-8.687	5.643	36.491	1.00	18.77	C
ATOM	3017	O	PRO	A	384	-7.860	6.487	36.866	1.00	20.60	O
ATOM	3018	CB	PRO	A	384	-8.890	3.683	34.890	1.00	14.10	C
ATOM	3019	CG	PRO	A	384	-9.622	2.425	35.353	1.00	14.48	C
ATOM	3020	CD	PRO	A	384	-8.870	1.952	36.529	1.00	13.10	C
ATOM	3021	N	GLN	A	385	-10.005	5.890	36.426	1.00	19.75	N
ATOM	3022	CA	GLN	A	385	-10.623	7.176	36.806	1.00	19.44	C
ATOM	3023	C	GLN	A	385	-9.841	7.869	37.909	1.00	19.08	C
ATOM	3024	O	GLN	A	385	-9.943	9.075	38.105	1.00	19.58	O
ATOM	3025	CB	GLN	A	385	-12.068	6.967	37.300	1.00	18.93	C
ATOM	3026	CG	GLN	A	385	-13.135	7.054	36.222	1.00	22.91	C
ATOM	3027	CD	GLN	A	385	-14.452	7.633	36.729	1.00	27.37	C
ATOM	3028	NE2	GLN	A	385	-14.359	8.627	37.618	1.00	29.27	N
ATOM	3029	OE1	GLN	A	385	-15.538	7.269	36.248	1.00	23.96	O
ATOM	3030	N	ASN	A	386	-9.198	7.062	38.735	1.00	19.76	N
ATOM	3031	CA	ASN	A	386	-8.384	7.586	39.800	1.00	22.19	C
ATOM	3032	C	ASN	A	386	-6.935	7.815	39.379	1.00	20.96	C
ATOM	3033	O	ASN	A	386	-6.552	8.967	39.235	1.00	20.97	O
ATOM	3034	CB	ASN	A	386	-8.524	6.695	41.050	1.00	23.37	C
ATOM	3035	CG	ASN	A	386	-9.864	6.933	41.789	1.00	24.44	C
ATOM	3036	ND2	ASN	A	386	-10.081	8.176	42.227	1.00	19.73	N
ATOM	3037	OD1	ASN	A	386	-10.734	6.045	41.845	1.00	22.44	O
ATOM	3038	N	LEU	A	387	-6.223	6.749	38.991	1.00	20.99	N
ATOM	3039	CA	LEU	A	387	-4.777	6.761	38.639	1.00	19.03	C
ATOM	3040	C	LEU	A	387	-4.344	7.967	37.800	1.00	19.94	C
ATOM	3041	O	LEU	A	387	-3.326	8.605	38.088	1.00	15.85	O
ATOM	3042	CB	LEU	A	387	-4.387	5.459	37.888	1.00	16.60	C
ATOM	3043	CG	LEU	A	387	-2.952	5.202	37.368	1.00	14.35	C
ATOM	3044	CD1	LEU	A	387	-2.328	3.996	38.035	1.00	8.49	C
ATOM	3045	CD2	LEU	A	387	-2.974	4.987	35.868	1.00	12.25	C
ATOM	3046	N	ILE	A	388	-5.183	8.336	36.838	1.00	21.75	N
ATOM	3047	CA	ILE	A	388	-4.984	9.544	36.034	1.00	24.55	C
ATOM	3048	C	ILE	A	388	-5.094	10.847	36.880	1.00	26.81	C
ATOM	3049	O	ILE	A	388	-5.268	11.943	36.341	1.00	26.63	O
ATOM	3050	CB	ILE	A	388	-6.000	9.592	34.822	1.00	22.71	C

ATOM	3051	CG1	ILE	A	388	-6.237	8.196	34.243	1.00	18.19	C
ATOM	3052	CG2	ILE	A	388	-5.417	10.407	33.692	1.00	22.80	C
ATOM	3053	CD1	ILE	A	388	-4.998	7.574	33.621	1.00	16.41	C
ATOM	3054	N	LYS	A	389	-5.028	10.699	38.205	1.00	29.41	N
ATOM	3055	CA	LYS	A	389	-4.770	11.788	39.136	1.00	30.13	C
ATOM	3056	C	LYS	A	389	-3.251	11.818	39.376	1.00	30.26	C
ATOM	3057	O	LYS	A	389	-2.558	12.722	38.899	1.00	30.98	O
ATOM	3058	CB	LYS	A	389	-5.517	11.556	40.468	1.00	33.95	C
ATOM	3059	CG	LYS	A	389	-5.040	12.458	41.657	1.00	35.82	C
ATOM	3060	CD	LYS	A	389	-5.674	12.085	43.010	1.00	34.70	C
ATOM	3061	CE	LYS	A	389	-6.883	12.973	43.356	1.00	35.61	C
ATOM	3062	NZ	LYS	A	389	-8.212	12.441	42.868	1.00	33.54	N1+
ATOM	3063	N	GLN	A	390	-2.709	10.787	40.017	1.00	29.25	N
ATOM	3064	CA	GLN	A	390	-1.259	10.707	40.162	1.00	28.68	C
ATOM	3065	C	GLN	A	390	-0.642	10.117	38.874	1.00	27.03	C
ATOM	3066	O	GLN	A	390	0.333	9.360	38.911	1.00	26.91	O
ATOM	3067	CB	GLN	A	390	-0.882	9.887	41.406	1.00	29.73	C
ATOM	3068	CG	GLN	A	390	0.416	10.334	42.107	1.00	28.58	C
ATOM	3069	CD	GLN	A	390	0.193	11.454	43.108	1.00	29.76	C
ATOM	3070	NE2	GLN	A	390	-0.114	11.089	44.353	1.00	30.78	N
ATOM	3071	OE1	GLN	A	390	0.315	12.635	42.775	1.00	30.93	O
ATOM	3072	N	ASN	A	391	-1.358	10.288	37.772	1.00	24.04	N
ATOM	3073	CA	ASN	A	391	-0.718	10.582	36.515	1.00	22.15	C
ATOM	3074	C	ASN	A	391	-0.857	12.091	36.495	1.00	18.92	C
ATOM	3075	O	ASN	A	391	-0.065	12.773	37.132	1.00	18.87	O
ATOM	3076	CB	ASN	A	391	-1.487	9.959	35.334	1.00	28.55	C
ATOM	3077	CG	ASN	A	391	-0.680	8.877	34.571	1.00	33.87	C
ATOM	3078	ND2	ASN	A	391	0.535	8.555	35.050	1.00	36.03	N
ATOM	3079	OD1	ASN	A	391	-1.189	8.289	33.605	1.00	33.57	O
ATOM	3080	N	CYS	A	392	-2.048	12.556	36.135	1.00	16.20	N
ATOM	3081	CA	CYS	A	392	-2.222	13.923	35.670	1.00	13.67	C
ATOM	3082	C	CYS	A	392	-2.326	14.985	36.745	1.00	13.13	C
ATOM	3083	O	CYS	A	392	-2.971	16.008	36.549	1.00	15.19	O
ATOM	3084	CB	CYS	A	392	-3.420	14.004	34.730	1.00	11.64	C
ATOM	3085	SG	CYS	A	392	-3.165	13.048	33.210	1.00	12.44	S
ATOM	3086	N	GLU	A	393	-1.503	14.864	37.768	1.00	14.75	N
ATOM	3087	CA	GLU	A	393	-1.268	16.000	38.653	1.00	19.49	C
ATOM	3088	C	GLU	A	393	0.227	16.228	38.975	1.00	20.11	C
ATOM	3089	O	GLU	A	393	0.754	17.335	38.787	1.00	18.94	O
ATOM	3090	CB	GLU	A	393	-2.081	15.840	39.940	1.00	20.40	C
ATOM	3091	CG	GLU	A	393	-2.403	17.152	40.613	1.00	20.82	C
ATOM	3092	CD	GLU	A	393	-3.414	16.997	41.713	1.00	22.54	C
ATOM	3093	OE1	GLU	A	393	-3.048	16.456	42.785	1.00	24.39	O
ATOM	3094	OE2	GLU	A	393	-4.574	17.418	41.505	1.00	24.30	O1-
ATOM	3095	N	LEU	A	394	0.908	15.165	39.396	1.00	19.67	N
ATOM	3096	CA	LEU	A	394	2.353	15.160	39.518	1.00	21.83	C
ATOM	3097	C	LEU	A	394	2.947	15.795	38.259	1.00	24.26	C
ATOM	3098	O	LEU	A	394	3.959	16.503	38.286	1.00	26.00	O
ATOM	3099	CB	LEU	A	394	2.839	13.722	39.646	1.00	21.88	C
ATOM	3100	CG	LEU	A	394	4.062	13.487	40.531	1.00	23.92	C
ATOM	3101	CD1	LEU	A	394	5.242	14.340	40.026	1.00	25.67	C
ATOM	3102	CD2	LEU	A	394	3.724	13.789	41.997	1.00	21.11	C
ATOM	3103	N	PHE	A	395	2.277	15.598	37.142	1.00	25.37	N
ATOM	3104	CA	PHE	A	395	2.708	16.304	35.965	1.00	25.77	C
ATOM	3105	C	PHE	A	395	2.196	17.746	35.907	1.00	26.16	C
ATOM	3106	O	PHE	A	395	2.988	18.663	36.144	1.00	26.53	O
ATOM	3107	CB	PHE	A	395	2.361	15.469	34.744	1.00	25.66	C
ATOM	3108	CG	PHE	A	395	3.224	14.254	34.625	1.00	26.69	C
ATOM	3109	CD1	PHE	A	395	4.603	14.367	34.780	1.00	26.93	C
ATOM	3110	CD2	PHE	A	395	2.676	13.000	34.460	1.00	26.92	C
ATOM	3111	CE1	PHE	A	395	5.417	13.264	34.773	1.00	25.90	C
ATOM	3112	CE2	PHE	A	395	3.487	11.886	34.451	1.00	29.35	C
ATOM	3113	CZ	PHE	A	395	4.867	12.022	34.609	1.00	28.67	C
ATOM	3114	N	GLU	A	396	0.868	17.902	35.930	1.00	24.62	N
ATOM	3115	CA	GLU	A	396	0.191	19.186	35.745	1.00	22.66	C
ATOM	3116	C	GLU	A	396	0.982	20.346	36.329	1.00	24.98	C
ATOM	3117	O	GLU	A	396	1.905	20.842	35.684	1.00	25.79	O
ATOM	3118	CB	GLU	A	396	-1.209	19.129	36.363	1.00	21.41	C
ATOM	3119	CG	GLU	A	396	-2.062	20.342	36.075	1.00	18.86	C
ATOM	3120	CD	GLU	A	396	-3.511	20.135	36.448	1.00	19.66	C
ATOM	3121	OE1	GLU	A	396	-4.119	19.159	35.965	1.00	21.53	O

ATOM	3122	OE2	GLU	A	396	-4.056	20.951	37.210	1.00	16.14	O1-
ATOM	3123	N	GLN	A	397	0.686	20.717	37.577	1.00	28.23	N
ATOM	3124	CA	GLN	A	397	1.460	21.738	38.288	1.00	27.32	C
ATOM	3125	C	GLN	A	397	2.530	20.945	38.997	1.00	25.36	C
ATOM	3126	O	GLN	A	397	2.351	20.612	40.158	1.00	22.92	O
ATOM	3127	CB	GLN	A	397	0.595	22.527	39.326	1.00	28.36	C
ATOM	3128	CG	GLN	A	397	1.354	23.682	40.097	1.00	26.26	C
ATOM	3129	CD	GLN	A	397	0.487	24.528	41.064	1.00	25.26	C
ATOM	3130	NE2	GLN	A	397	-0.812	24.290	41.070	1.00	27.07	N
ATOM	3131	OE1	GLN	A	397	1.011	25.332	41.847	1.00	24.51	O
ATOM	3132	N	LEU	A	398	3.461	20.405	38.210	1.00	25.94	N
ATOM	3133	CA	LEU	A	398	4.677	19.792	38.751	1.00	26.57	C
ATOM	3134	C	LEU	A	398	5.577	19.106	37.699	1.00	24.32	C
ATOM	3135	O	LEU	A	398	6.460	18.340	38.071	1.00	22.18	O
ATOM	3136	CB	LEU	A	398	4.328	18.793	39.899	1.00	29.28	C
ATOM	3137	CG	LEU	A	398	4.839	18.900	41.365	1.00	29.60	C
ATOM	3138	CD1	LEU	A	398	4.218	20.072	42.135	1.00	29.70	C
ATOM	3139	CD2	LEU	A	398	4.513	17.604	42.113	1.00	27.39	C
ATOM	3140	N	GLY	A	399	5.407	19.409	36.409	1.00	24.36	N
ATOM	3141	CA	GLY	A	399	6.447	19.039	35.442	1.00	26.34	C
ATOM	3142	C	GLY	A	399	6.243	18.217	34.146	1.00	25.35	C
ATOM	3143	O	GLY	A	399	6.431	16.983	34.105	1.00	24.71	O
ATOM	3144	N	GLU	A	400	6.272	18.954	33.041	1.00	23.31	N
ATOM	3145	CA	GLU	A	400	6.309	18.381	31.700	1.00	21.85	C
ATOM	3146	C	GLU	A	400	7.499	17.394	31.494	1.00	21.88	C
ATOM	3147	O	GLU	A	400	7.351	16.186	31.628	1.00	20.25	O
ATOM	3148	CB	GLU	A	400	6.389	19.544	30.704	1.00	18.99	C
ATOM	3149	CG	GLU	A	400	5.051	20.164	30.301	1.00	18.80	C
ATOM	3150	CD	GLU	A	400	4.368	21.016	31.372	1.00	15.88	C
ATOM	3151	OE1	GLU	A	400	4.576	20.786	32.574	1.00	13.73	O
ATOM	3152	OE2	GLU	A	400	3.524	21.862	30.999	1.00	14.44	O1-
ATOM	3153	N	TYR	A	401	8.701	17.951	31.356	1.00	22.47	N
ATOM	3154	CA	TYR	A	401	9.926	17.216	31.020	1.00	20.38	C
ATOM	3155	C	TYR	A	401	10.935	17.239	32.181	1.00	19.52	C
ATOM	3156	O	TYR	A	401	12.064	16.790	32.033	1.00	18.53	O
ATOM	3157	CB	TYR	A	401	10.554	17.881	29.797	1.00	23.78	C
ATOM	3158	CG	TYR	A	401	11.448	16.997	28.969	1.00	25.15	C
ATOM	3159	CD1	TYR	A	401	12.748	16.752	29.363	1.00	25.90	C
ATOM	3160	CD2	TYR	A	401	11.060	16.579	27.706	1.00	25.00	C
ATOM	3161	CE1	TYR	A	401	13.641	16.158	28.525	1.00	27.01	C
ATOM	3162	CE2	TYR	A	401	11.948	15.979	26.863	1.00	26.20	C
ATOM	3163	CZ	TYR	A	401	13.250	15.790	27.270	1.00	26.58	C
ATOM	3164	OH	TYR	A	401	14.209	15.388	26.375	1.00	22.64	O
ATOM	3165	N	LYS	A	402	10.621	18.021	33.211	1.00	22.60	N
ATOM	3166	CA	LYS	A	402	11.307	17.936	34.503	1.00	22.71	C
ATOM	3167	C	LYS	A	402	10.981	16.574	35.103	1.00	24.22	C
ATOM	3168	O	LYS	A	402	11.543	15.565	34.676	1.00	25.37	O
ATOM	3169	CB	LYS	A	402	10.845	19.067	35.435	1.00	20.39	C
ATOM	3170	CG	LYS	A	402	11.323	18.957	36.876	1.00	17.50	C
ATOM	3171	CD	LYS	A	402	12.633	19.686	37.105	1.00	17.85	C
ATOM	3172	CE	LYS	A	402	13.838	18.750	37.135	1.00	17.83	C
ATOM	3173	NZ	LYS	A	402	15.068	19.486	37.556	1.00	19.64	N1+
ATOM	3174	N	PHE	A	403	9.954	16.495	35.941	1.00	25.18	N
ATOM	3175	CA	PHE	A	403	9.679	15.217	36.562	1.00	28.48	C
ATOM	3176	C	PHE	A	403	8.640	14.362	35.850	1.00	30.15	C
ATOM	3177	O	PHE	A	403	7.621	13.986	36.423	1.00	30.31	O
ATOM	3178	CB	PHE	A	403	9.370	15.398	38.045	1.00	28.85	C
ATOM	3179	CG	PHE	A	403	10.610	15.601	38.886	1.00	30.05	C
ATOM	3180	CD1	PHE	A	403	11.155	16.860	39.037	1.00	28.78	C
ATOM	3181	CD2	PHE	A	403	11.326	14.511	39.371	1.00	29.76	C
ATOM	3182	CE1	PHE	A	403	12.393	17.026	39.632	1.00	28.52	C
ATOM	3183	CE2	PHE	A	403	12.561	14.677	39.967	1.00	26.34	C
ATOM	3184	CZ	PHE	A	403	13.097	15.928	40.092	1.00	26.88	C
ATOM	3185	N	GLN	A	404	8.911	14.106	34.565	1.00	32.37	N
ATOM	3186	CA	GLN	A	404	8.532	12.852	33.887	1.00	30.49	C
ATOM	3187	C	GLN	A	404	9.506	11.781	34.350	1.00	29.27	C
ATOM	3188	O	GLN	A	404	9.194	10.601	34.304	1.00	29.71	O
ATOM	3189	CB	GLN	A	404	8.648	12.975	32.361	1.00	31.75	C
ATOM	3190	CG	GLN	A	404	10.038	12.639	31.796	1.00	30.57	C
ATOM	3191	CD	GLN	A	404	10.134	12.873	30.298	1.00	31.42	C
ATOM	3192	NE2	GLN	A	404	9.715	11.891	29.507	1.00	30.06	N

ATOM	3193	OE1	GLN	A	404	10.548	13.942	29.858	1.00	31.82	O
ATOM	3194	N	ASN	A	405	10.695	12.196	34.786	1.00	27.19	N
ATOM	3195	CA	ASN	A	405	11.561	11.290	35.527	1.00	24.01	C
ATOM	3196	C	ASN	A	405	11.159	11.181	37.030	1.00	21.70	C
ATOM	3197	O	ASN	A	405	11.983	11.211	37.946	1.00	15.16	O
ATOM	3198	CB	ASN	A	405	13.033	11.663	35.278	1.00	22.91	C
ATOM	3199	CG	ASN	A	405	13.611	12.577	36.314	1.00	19.47	C
ATOM	3200	ND2	ASN	A	405	13.058	13.770	36.427	1.00	19.73	N
ATOM	3201	OD1	ASN	A	405	14.666	12.283	36.866	1.00	17.07	O
ATOM	3202	N	ALA	A	406	9.852	10.999	37.231	1.00	19.67	N
ATOM	3203	CA	ALA	A	406	9.294	10.467	38.458	1.00	18.79	C
ATOM	3204	C	ALA	A	406	8.941	9.011	38.194	1.00	20.96	C
ATOM	3205	O	ALA	A	406	9.168	8.141	39.044	1.00	23.15	O
ATOM	3206	CB	ALA	A	406	8.048	11.228	38.841	1.00	15.73	C
ATOM	3207	N	LEU	A	407	8.393	8.731	37.013	1.00	19.76	N
ATOM	3208	CA	LEU	A	407	7.955	7.379	36.692	1.00	16.89	C
ATOM	3209	C	LEU	A	407	9.136	6.433	36.519	1.00	17.14	C
ATOM	3210	O	LEU	A	407	8.978	5.221	36.655	1.00	15.99	O
ATOM	3211	CB	LEU	A	407	7.086	7.393	35.444	1.00	16.01	C
ATOM	3212	CG	LEU	A	407	5.659	7.835	35.763	1.00	18.48	C
ATOM	3213	CD1	LEU	A	407	4.978	8.430	34.540	1.00	20.67	C
ATOM	3214	CD2	LEU	A	407	4.871	6.641	36.285	1.00	20.49	C
ATOM	3215	N	LEU	A	408	10.317	6.998	36.250	1.00	18.02	N
ATOM	3216	CA	LEU	A	408	11.617	6.307	36.411	1.00	18.24	C
ATOM	3217	C	LEU	A	408	11.824	5.869	37.872	1.00	18.70	C
ATOM	3218	O	LEU	A	408	11.811	4.687	38.190	1.00	17.33	O
ATOM	3219	CB	LEU	A	408	12.767	7.250	36.018	1.00	18.19	C
ATOM	3220	CG	LEU	A	408	13.659	7.027	34.797	1.00	16.19	C
ATOM	3221	CD1	LEU	A	408	14.511	8.259	34.575	1.00	11.96	C
ATOM	3222	CD2	LEU	A	408	14.539	5.807	34.995	1.00	16.05	C
ATOM	3223	N	VAL	A	409	11.989	6.846	38.759	1.00	20.54	N
ATOM	3224	CA	VAL	A	409	12.091	6.603	40.193	1.00	20.69	C
ATOM	3225	C	VAL	A	409	11.118	5.538	40.642	1.00	21.47	C
ATOM	3226	O	VAL	A	409	11.487	4.672	41.418	1.00	23.58	O
ATOM	3227	CB	VAL	A	409	11.797	7.867	41.012	1.00	19.59	C
ATOM	3228	CG1	VAL	A	409	11.897	7.549	42.518	1.00	19.23	C
ATOM	3229	CG2	VAL	A	409	12.753	8.975	40.613	1.00	17.46	C
ATOM	3230	N	ARG	A	410	9.879	5.610	40.163	1.00	21.93	N
ATOM	3231	CA	ARG	A	410	8.889	4.593	40.488	1.00	21.95	C
ATOM	3232	C	ARG	A	410	9.369	3.263	39.930	1.00	21.48	C
ATOM	3233	O	ARG	A	410	9.723	2.363	40.692	1.00	24.94	O
ATOM	3234	CB	ARG	A	410	7.506	4.939	39.904	1.00	22.67	C
ATOM	3235	CG	ARG	A	410	6.846	6.205	40.445	1.00	20.28	C
ATOM	3236	CD	ARG	A	410	5.357	6.220	40.114	1.00	20.80	C
ATOM	3237	NE	ARG	A	410	4.733	7.522	40.365	1.00	20.80	N
ATOM	3238	CZ	ARG	A	410	3.487	7.841	40.011	1.00	20.59	C
ATOM	3239	NH1	ARG	A	410	2.705	6.941	39.426	1.00	21.04	N1+
ATOM	3240	NH2	ARG	A	410	3.025	9.067	40.234	1.00	20.07	N
ATOM	3241	N	TYR	A	411	9.529	3.186	38.615	1.00	18.76	N
ATOM	3242	CA	TYR	A	411	9.792	1.907	37.974	1.00	17.50	C
ATOM	3243	C	TYR	A	411	11.169	1.356	38.330	1.00	17.38	C
ATOM	3244	O	TYR	A	411	11.289	0.240	38.823	1.00	15.90	O
ATOM	3245	CB	TYR	A	411	9.606	2.024	36.453	1.00	18.41	C
ATOM	3246	CG	TYR	A	411	8.151	1.974	36.064	1.00	17.19	C
ATOM	3247	CD1	TYR	A	411	7.215	2.657	36.815	1.00	15.09	C
ATOM	3248	CD2	TYR	A	411	7.684	1.060	35.137	1.00	18.38	C
ATOM	3249	CE1	TYR	A	411	5.885	2.431	36.681	1.00	11.66	C
ATOM	3250	CE2	TYR	A	411	6.325	0.829	34.998	1.00	15.51	C
ATOM	3251	CZ	TYR	A	411	5.436	1.536	35.776	1.00	12.43	C
ATOM	3252	OH	TYR	A	411	4.079	1.476	35.573	1.00	16.59	O
ATOM	3253	N	THR	A	412	12.186	2.195	38.234	1.00	19.91	N
ATOM	3254	CA	THR	A	412	13.541	1.791	38.601	1.00	24.09	C
ATOM	3255	C	THR	A	412	13.591	1.176	39.988	1.00	23.32	C
ATOM	3256	O	THR	A	412	14.583	0.526	40.342	1.00	22.82	O
ATOM	3257	CB	THR	A	412	14.510	2.978	38.590	1.00	26.90	C
ATOM	3258	CG2	THR	A	412	15.900	2.514	38.214	1.00	29.28	C
ATOM	3259	OG1	THR	A	412	14.063	3.952	37.634	1.00	31.00	O
ATOM	3260	N	LYS	A	413	12.580	1.492	40.802	1.00	21.28	N
ATOM	3261	CA	LYS	A	413	12.512	1.006	42.170	1.00	19.27	C
ATOM	3262	C	LYS	A	413	11.796	-0.322	42.158	1.00	19.80	C
ATOM	3263	O	LYS	A	413	12.418	-1.382	42.340	1.00	20.91	O

ATOM	3264	CB	LYS	A	413	11.768	1.999	43.068	1.00	16.46	C
ATOM	3265	CG	LYS	A	413	12.670	2.713	44.084	1.00	17.32	C
ATOM	3266	CD	LYS	A	413	11.899	3.127	45.323	1.00	18.80	C
ATOM	3267	CE	LYS	A	413	11.409	4.570	45.242	1.00	21.30	C
ATOM	3268	NZ	LYS	A	413	12.515	5.551	45.015	1.00	20.06	N1+
ATOM	3269	N	LYS	A	414	10.531	-0.282	41.752	1.00	18.33	N
ATOM	3270	CA	LYS	A	414	9.678	-1.445	41.909	1.00	16.94	C
ATOM	3271	C	LYS	A	414	10.083	-2.597	41.015	1.00	17.20	C
ATOM	3272	O	LYS	A	414	9.744	-3.742	41.285	1.00	17.03	O
ATOM	3273	CB	LYS	A	414	8.192	-1.098	41.704	1.00	17.27	C
ATOM	3274	CG	LYS	A	414	7.823	-0.088	40.645	1.00	12.68	C
ATOM	3275	CD	LYS	A	414	6.341	-0.276	40.311	1.00	14.55	C
ATOM	3276	CE	LYS	A	414	5.798	0.739	39.303	1.00	14.56	C
ATOM	3277	NZ	LYS	A	414	5.337	2.037	39.917	1.00	14.02	N1+
ATOM	3278	N	VAL	A	415	10.934	-2.302	40.043	1.00	17.01	N
ATOM	3279	CA	VAL	A	415	11.369	-3.287	39.070	1.00	16.75	C
ATOM	3280	C	VAL	A	415	12.780	-2.914	38.581	1.00	21.86	C
ATOM	3281	O	VAL	A	415	12.949	-2.362	37.490	1.00	23.99	O
ATOM	3282	CB	VAL	A	415	10.373	-3.353	37.897	1.00	12.19	C
ATOM	3283	CG1	VAL	A	415	10.301	-2.032	37.199	1.00	10.88	C
ATOM	3284	CG2	VAL	A	415	10.754	-4.432	36.947	1.00	9.96	C
ATOM	3285	N	PRO	A	416	13.817	-3.194	39.401	1.00	23.73	N
ATOM	3286	CA	PRO	A	416	15.121	-2.556	39.239	1.00	23.14	C
ATOM	3287	C	PRO	A	416	16.129	-3.485	38.583	1.00	22.45	C
ATOM	3288	O	PRO	A	416	17.310	-3.467	38.920	1.00	20.59	O
ATOM	3289	CB	PRO	A	416	15.513	-2.221	40.679	1.00	26.64	C
ATOM	3290	CG	PRO	A	416	14.755	-3.262	41.552	1.00	24.34	C
ATOM	3291	CD	PRO	A	416	13.777	-3.984	40.645	1.00	25.02	C
ATOM	3292	N	GLN	A	417	15.653	-4.338	37.686	1.00	24.78	N
ATOM	3293	CA	GLN	A	417	16.554	-5.178	36.894	1.00	25.39	C
ATOM	3294	C	GLN	A	417	16.386	-5.115	35.367	1.00	25.68	C
ATOM	3295	O	GLN	A	417	17.256	-5.608	34.646	1.00	28.59	O
ATOM	3296	CB	GLN	A	417	16.476	-6.640	37.343	1.00	22.92	C
ATOM	3297	CG	GLN	A	417	17.445	-6.998	38.437	1.00	16.76	C
ATOM	3298	CD	GLN	A	417	16.729	-7.293	39.727	1.00	19.80	C
ATOM	3299	NE2	GLN	A	417	17.337	-8.118	40.561	1.00	17.72	N
ATOM	3300	OE1	GLN	A	417	15.618	-6.796	39.965	1.00	20.09	O
ATOM	3301	N	VAL	A	418	15.284	-4.562	34.862	1.00	23.83	N
ATOM	3302	CA	VAL	A	418	15.206	-4.262	33.420	1.00	25.79	C
ATOM	3303	C	VAL	A	418	16.443	-3.398	33.023	1.00	25.27	C
ATOM	3304	O	VAL	A	418	17.075	-2.784	33.886	1.00	26.72	O
ATOM	3305	CB	VAL	A	418	13.872	-3.506	33.057	1.00	24.98	C
ATOM	3306	CG1	VAL	A	418	13.516	-3.697	31.597	1.00	21.82	C
ATOM	3307	CG2	VAL	A	418	12.720	-4.010	33.907	1.00	25.57	C
ATOM	3308	N	SER	A	419	16.865	-3.451	31.761	1.00	23.89	N
ATOM	3309	CA	SER	A	419	18.115	-2.791	31.338	1.00	24.81	C
ATOM	3310	C	SER	A	419	18.045	-1.274	31.448	1.00	23.00	C
ATOM	3311	O	SER	A	419	17.072	-0.685	31.022	1.00	23.69	O
ATOM	3312	CB	SER	A	419	18.449	-3.159	29.888	1.00	25.20	C
ATOM	3313	OG	SER	A	419	18.798	-4.528	29.762	1.00	28.67	O
ATOM	3314	N	THR	A	420	19.130	-0.623	31.854	1.00	24.58	N
ATOM	3315	CA	THR	A	420	19.075	0.829	32.039	1.00	24.29	C
ATOM	3316	C	THR	A	420	18.501	1.555	30.855	1.00	24.81	C
ATOM	3317	O	THR	A	420	17.600	2.367	31.013	1.00	26.08	O
ATOM	3318	CB	THR	A	420	20.425	1.453	32.348	1.00	21.78	C
ATOM	3319	CG2	THR	A	420	20.375	2.953	32.130	1.00	21.26	C
ATOM	3320	OG1	THR	A	420	20.763	1.193	33.715	1.00	24.19	O
ATOM	3321	N	PRO	A	421	18.946	1.222	29.642	1.00	25.02	N
ATOM	3322	CA	PRO	A	421	18.193	1.830	28.545	1.00	26.98	C
ATOM	3323	C	PRO	A	421	16.704	1.458	28.629	1.00	27.18	C
ATOM	3324	O	PRO	A	421	15.850	2.349	28.768	1.00	25.10	O
ATOM	3325	CB	PRO	A	421	18.867	1.272	27.282	1.00	27.79	C
ATOM	3326	CG	PRO	A	421	19.758	0.135	27.777	1.00	29.44	C
ATOM	3327	CD	PRO	A	421	20.152	0.531	29.167	1.00	25.03	C
ATOM	3328	N	THR	A	422	16.427	0.149	28.728	1.00	26.36	N
ATOM	3329	CA	THR	A	422	15.064	-0.393	28.605	1.00	24.58	C
ATOM	3330	C	THR	A	422	14.162	0.069	29.744	1.00	24.87	C
ATOM	3331	O	THR	A	422	13.011	-0.349	29.839	1.00	27.96	O
ATOM	3332	CB	THR	A	422	15.058	-1.947	28.560	1.00	21.16	C
ATOM	3333	CG2	THR	A	422	13.682	-2.465	28.189	1.00	21.32	C
ATOM	3334	OG1	THR	A	422	15.985	-2.411	27.570	1.00	20.86	O

ATOM	3335	N	LEU	A	423	14.745	0.778	30.703	1.00	25.19	N
ATOM	3336	CA	LEU	A	423	13.976	1.651	31.558	1.00	22.20	C
ATOM	3337	C	LEU	A	423	13.860	2.946	30.755	1.00	22.66	C
ATOM	3338	O	LEU	A	423	12.860	3.113	30.062	1.00	22.77	O
ATOM	3339	CB	LEU	A	423	14.689	1.889	32.891	1.00	23.24	C
ATOM	3340	CG	LEU	A	423	14.626	0.885	34.065	1.00	22.20	C
ATOM	3341	CD1	LEU	A	423	13.289	0.159	34.098	1.00	19.45	C
ATOM	3342	CD2	LEU	A	423	15.788	-0.093	33.971	1.00	18.12	C
ATOM	3343	N	VAL	A	424	14.969	3.678	30.592	1.00	22.40	N
ATOM	3344	CA	VAL	A	424	14.941	5.007	29.944	1.00	19.48	C
ATOM	3345	C	VAL	A	424	14.315	5.097	28.554	1.00	21.48	C
ATOM	3346	O	VAL	A	424	14.119	6.211	28.067	1.00	23.47	O
ATOM	3347	CB	VAL	A	424	16.337	5.707	29.809	1.00	17.06	C
ATOM	3348	CG1	VAL	A	424	16.141	7.204	29.867	1.00	9.48	C
ATOM	3349	CG2	VAL	A	424	17.336	5.264	30.890	1.00	14.26	C
ATOM	3350	N	GLU	A	425	13.977	3.977	27.908	1.00	20.71	N
ATOM	3351	CA	GLU	A	425	13.114	4.076	26.724	1.00	20.21	C
ATOM	3352	C	GLU	A	425	11.679	4.209	27.187	1.00	21.09	C
ATOM	3353	O	GLU	A	425	10.983	5.151	26.790	1.00	22.27	O
ATOM	3354	CB	GLU	A	425	13.231	2.868	25.790	1.00	19.48	C
ATOM	3355	CG	GLU	A	425	13.577	3.210	24.334	1.00	17.47	C
ATOM	3356	CD	GLU	A	425	12.582	4.152	23.653	1.00	17.36	C
ATOM	3357	OE1	GLU	A	425	12.703	5.386	23.801	1.00	16.77	O
ATOM	3358	OE2	GLU	A	425	11.746	3.674	22.860	1.00	20.99	O1-
ATOM	3359	N	VAL	A	426	11.277	3.332	28.108	1.00	20.45	N
ATOM	3360	CA	VAL	A	426	9.940	3.379	28.710	1.00	18.52	C
ATOM	3361	C	VAL	A	426	9.831	4.594	29.631	1.00	17.11	C
ATOM	3362	O	VAL	A	426	9.014	5.466	29.407	1.00	19.30	O
ATOM	3363	CB	VAL	A	426	9.662	2.131	29.556	1.00	17.57	C
ATOM	3364	CG1	VAL	A	426	8.194	1.980	29.795	1.00	17.28	C
ATOM	3365	CG2	VAL	A	426	10.227	0.911	28.878	1.00	20.59	C
ATOM	3366	N	SER	A	427	10.693	4.664	30.635	1.00	14.13	N
ATOM	3367	CA	SER	A	427	10.598	5.670	31.676	1.00	14.17	C
ATOM	3368	C	SER	A	427	10.109	7.012	31.164	1.00	13.54	C
ATOM	3369	O	SER	A	427	9.024	7.432	31.522	1.00	11.17	O
ATOM	3370	CB	SER	A	427	11.950	5.834	32.356	1.00	17.92	C
ATOM	3371	OG	SER	A	427	12.541	4.586	32.668	1.00	14.61	O
ATOM	3372	N	ARG	A	428	10.786	7.547	30.152	1.00	15.97	N
ATOM	3373	CA	ARG	A	428	10.307	8.758	29.451	1.00	19.71	C
ATOM	3374	C	ARG	A	428	9.104	8.551	28.504	1.00	19.67	C
ATOM	3375	O	ARG	A	428	8.208	9.395	28.438	1.00	20.46	O
ATOM	3376	CB	ARG	A	428	11.447	9.463	28.679	1.00	17.27	C
ATOM	3377	CG	ARG	A	428	12.600	8.580	28.234	1.00	13.84	C
ATOM	3378	CD	ARG	A	428	13.345	9.187	27.075	1.00	12.03	C
ATOM	3379	NE	ARG	A	428	13.832	10.531	27.369	1.00	13.38	N
ATOM	3380	CZ	ARG	A	428	13.437	11.648	26.750	1.00	12.65	C
ATOM	3381	NH1	ARG	A	428	12.447	11.635	25.863	1.00	7.48	N1+
ATOM	3382	NH2	ARG	A	428	14.028	12.800	27.040	1.00	10.10	N
ATOM	3383	N	ASN	A	429	9.094	7.458	27.750	1.00	20.12	N
ATOM	3384	CA	ASN	A	429	7.972	7.177	26.876	1.00	20.34	C
ATOM	3385	C	ASN	A	429	6.612	7.140	27.579	1.00	20.43	C
ATOM	3386	O	ASN	A	429	5.772	7.993	27.303	1.00	23.09	O
ATOM	3387	CB	ASN	A	429	8.215	5.903	26.081	1.00	19.92	C
ATOM	3388	CG	ASN	A	429	8.527	6.196	24.626	1.00	23.69	C
ATOM	3389	ND2	ASN	A	429	9.313	7.253	24.394	1.00	24.44	N
ATOM	3390	OD1	ASN	A	429	7.988	5.552	23.716	1.00	23.46	O
ATOM	3391	N	LEU	A	430	6.418	6.233	28.542	1.00	18.98	N
ATOM	3392	CA	LEU	A	430	5.201	6.222	29.366	1.00	13.10	C
ATOM	3393	C	LEU	A	430	5.217	7.456	30.222	1.00	13.42	C
ATOM	3394	O	LEU	A	430	4.270	7.738	30.921	1.00	14.99	O
ATOM	3395	CB	LEU	A	430	5.120	4.968	30.239	1.00	7.34	C
ATOM	3396	CG	LEU	A	430	5.092	4.992	31.769	1.00	2.61	C
ATOM	3397	CD1	LEU	A	430	4.894	3.578	32.284	1.00	3.10	C
ATOM	3398	CD2	LEU	A	430	6.381	5.518	32.313	1.00	2.00	C
ATOM	3399	N	GLY	A	431	6.352	8.135	30.244	1.00	16.38	N
ATOM	3400	CA	GLY	A	431	6.351	9.513	30.682	1.00	17.97	C
ATOM	3401	C	GLY	A	431	5.371	10.263	29.810	1.00	17.99	C
ATOM	3402	O	GLY	A	431	4.290	10.586	30.285	1.00	20.37	O
ATOM	3403	N	LYS	A	432	5.621	10.252	28.499	1.00	16.66	N
ATOM	3404	CA	LYS	A	432	4.947	11.127	27.524	1.00	15.91	C
ATOM	3405	C	LYS	A	432	3.429	11.034	27.418	1.00	15.02	C

ATOM	3406	O	LYS	A	432	2.850	11.519	26.453	1.00	11.29	O
ATOM	3407	CB	LYS	A	432	5.525	10.900	26.135	1.00	16.80	C
ATOM	3408	CG	LYS	A	432	7.003	11.220	25.997	1.00	18.19	C
ATOM	3409	CD	LYS	A	432	7.359	11.418	24.526	1.00	19.26	C
ATOM	3410	CE	LYS	A	432	8.406	10.405	24.082	1.00	22.95	C
ATOM	3411	NZ	LYS	A	432	8.438	10.312	22.595	1.00	27.31	N1+
ATOM	3412	N	VAL	A	433	2.802	10.333	28.356	1.00	16.94	N
ATOM	3413	CA	VAL	A	433	1.353	10.328	28.507	1.00	15.68	C
ATOM	3414	C	VAL	A	433	0.985	11.622	29.194	1.00	14.62	C
ATOM	3415	O	VAL	A	433	0.140	12.354	28.707	1.00	18.83	O
ATOM	3416	CB	VAL	A	433	0.878	9.124	29.363	1.00	16.06	C
ATOM	3417	CG1	VAL	A	433	-0.188	9.552	30.376	1.00	15.00	C
ATOM	3418	CG2	VAL	A	433	0.367	8.019	28.463	1.00	10.29	C
ATOM	3419	N	GLY	A	434	1.701	11.967	30.251	1.00	13.40	N
ATOM	3420	CA	GLY	A	434	1.392	13.190	30.969	1.00	17.13	C
ATOM	3421	C	GLY	A	434	1.177	14.348	30.013	1.00	18.55	C
ATOM	3422	O	GLY	A	434	0.108	14.946	29.981	1.00	17.84	O
ATOM	3423	N	SER	A	435	2.091	14.472	29.063	1.00	20.65	N
ATOM	3424	CA	SER	A	435	2.031	15.533	28.073	1.00	21.99	C
ATOM	3425	C	SER	A	435	0.790	15.331	27.200	1.00	22.53	C
ATOM	3426	O	SER	A	435	-0.251	15.929	27.471	1.00	22.40	O
ATOM	3427	CB	SER	A	435	3.329	15.553	27.221	1.00	25.26	C
ATOM	3428	OG	SER	A	435	4.523	15.746	28.007	1.00	22.37	O
ATOM	3429	N	LYS	A	436	0.832	14.330	26.322	1.00	23.94	N
ATOM	3430	CA	LYS	A	436	-0.157	14.181	25.250	1.00	25.08	C
ATOM	3431	C	LYS	A	436	-1.528	13.626	25.661	1.00	24.18	C
ATOM	3432	O	LYS	A	436	-2.216	13.046	24.827	1.00	26.29	O
ATOM	3433	CB	LYS	A	436	0.410	13.295	24.120	1.00	27.26	C
ATOM	3434	CG	LYS	A	436	-0.211	13.540	22.713	1.00	29.66	C
ATOM	3435	CD	LYS	A	436	-0.836	12.276	22.091	1.00	28.08	C
ATOM	3436	CE	LYS	A	436	-2.362	12.442	21.910	1.00	28.14	C
ATOM	3437	NZ	LYS	A	436	-3.079	11.155	21.561	1.00	26.79	N1+
ATOM	3438	N	CYS	A	437	-1.959	13.825	26.903	1.00	22.66	N
ATOM	3439	CA	CYS	A	437	-3.299	13.371	27.287	1.00	22.80	C
ATOM	3440	C	CYS	A	437	-3.940	14.098	28.461	1.00	22.95	C
ATOM	3441	O	CYS	A	437	-5.118	14.394	28.420	1.00	23.92	O
ATOM	3442	CB	CYS	A	437	-3.317	11.854	27.520	1.00	19.38	C
ATOM	3443	SG	CYS	A	437	-3.502	10.914	25.959	1.00	24.98	S
ATOM	3444	N	CYS	A	438	-3.170	14.449	29.484	1.00	23.70	N
ATOM	3445	CA	CYS	A	438	-3.717	15.267	30.546	1.00	22.08	C
ATOM	3446	C	CYS	A	438	-4.216	16.551	29.900	1.00	23.11	C
ATOM	3447	O	CYS	A	438	-5.390	16.891	30.012	1.00	23.14	O
ATOM	3448	CB	CYS	A	438	-2.650	15.582	31.595	1.00	19.90	C
ATOM	3449	SG	CYS	A	438	-1.760	14.132	32.242	1.00	17.60	S
ATOM	3450	N	LYS	A	439	-3.378	17.119	29.037	1.00	25.03	N
ATOM	3451	CA	LYS	A	439	-3.676	18.377	28.346	1.00	25.75	C
ATOM	3452	C	LYS	A	439	-4.672	18.082	27.239	1.00	25.01	C
ATOM	3453	O	LYS	A	439	-4.405	18.336	26.059	1.00	22.62	O
ATOM	3454	CB	LYS	A	439	-2.385	18.981	27.761	1.00	27.02	C
ATOM	3455	CG	LYS	A	439	-2.044	20.364	28.297	1.00	26.58	C
ATOM	3456	CD	LYS	A	439	-0.569	20.490	28.681	1.00	25.12	C
ATOM	3457	CE	LYS	A	439	-0.261	21.909	29.205	1.00	26.40	C
ATOM	3458	NZ	LYS	A	439	1.186	22.172	29.539	1.00	24.08	N1+
ATOM	3459	N	HIS	A	440	-5.835	17.575	27.646	1.00	25.71	N
ATOM	3460	CA	HIS	A	440	-6.781	16.952	26.733	1.00	25.96	C
ATOM	3461	C	HIS	A	440	-8.119	16.494	27.332	1.00	26.52	C
ATOM	3462	O	HIS	A	440	-8.967	16.005	26.602	1.00	27.11	O
ATOM	3463	CB	HIS	A	440	-6.108	15.762	26.054	1.00	24.62	C
ATOM	3464	CG	HIS	A	440	-7.055	14.877	25.323	1.00	20.53	C
ATOM	3465	CD2	HIS	A	440	-7.449	13.606	25.559	1.00	20.18	C
ATOM	3466	ND1	HIS	A	440	-7.787	15.313	24.247	1.00	21.98	N
ATOM	3467	CE1	HIS	A	440	-8.575	14.341	23.830	1.00	22.57	C
ATOM	3468	NE2	HIS	A	440	-8.386	13.291	24.607	1.00	20.14	N
ATOM	3469	N	PRO	A	441	-8.400	16.840	28.595	1.00	28.45	N
ATOM	3470	CA	PRO	A	441	-9.107	15.970	29.553	1.00	30.20	C
ATOM	3471	C	PRO	A	441	-10.490	15.409	29.137	1.00	30.12	C
ATOM	3472	O	PRO	A	441	-10.683	15.001	27.984	1.00	28.70	O
ATOM	3473	CB	PRO	A	441	-9.202	16.838	30.811	1.00	32.36	C
ATOM	3474	CG	PRO	A	441	-9.186	18.258	30.292	1.00	32.89	C
ATOM	3475	CD	PRO	A	441	-8.282	18.229	29.090	1.00	30.04	C
ATOM	3476	N	GLU	A	442	-11.410	15.285	30.101	1.00	29.30	N

ATOM	3477	CA	GLU	A	442	-12.751	14.720	29.866	1.00	29.85	C
ATOM	3478	C	GLU	A	442	-12.863	13.169	29.936	1.00	28.51	C
ATOM	3479	O	GLU	A	442	-12.375	12.533	30.885	1.00	22.26	O
ATOM	3480	CB	GLU	A	442	-13.324	15.201	28.507	1.00	29.58	C
ATOM	3481	CG	GLU	A	442	-13.697	16.673	28.422	1.00	26.93	C
ATOM	3482	CD	GLU	A	442	-12.757	17.475	27.541	1.00	25.31	C
ATOM	3483	OE1	GLU	A	442	-11.572	17.123	27.442	1.00	20.53	O
ATOM	3484	OE2	GLU	A	442	-13.192	18.505	26.974	1.00	28.11	O1-
ATOM	3485	N	ALA	A	443	-13.822	12.669	29.147	1.00	27.70	N
ATOM	3486	CA	ALA	A	443	-13.825	11.304	28.638	1.00	26.01	C
ATOM	3487	C	ALA	A	443	-12.551	11.111	27.852	1.00	24.19	C
ATOM	3488	O	ALA	A	443	-11.639	10.447	28.316	1.00	26.28	O
ATOM	3489	CB	ALA	A	443	-15.016	11.089	27.708	1.00	26.77	C
ATOM	3490	N	LYS	A	444	-12.411	11.892	26.788	1.00	22.05	N
ATOM	3491	CA	LYS	A	444	-11.370	11.674	25.785	1.00	21.39	C
ATOM	3492	C	LYS	A	444	-10.000	11.321	26.357	1.00	20.82	C
ATOM	3493	O	LYS	A	444	-9.137	10.831	25.620	1.00	18.13	O
ATOM	3494	CB	LYS	A	444	-11.248	12.911	24.894	1.00	22.35	C
ATOM	3495	CG	LYS	A	444	-11.775	12.721	23.484	1.00	22.26	C
ATOM	3496	CD	LYS	A	444	-13.306	12.807	23.457	1.00	20.62	C
ATOM	3497	CE	LYS	A	444	-13.783	14.030	22.666	1.00	18.58	C
ATOM	3498	NZ	LYS	A	444	-13.011	15.272	22.977	1.00	15.81	N1+
ATOM	3499	N	ARG	A	445	-9.762	11.777	27.594	1.00	20.03	N
ATOM	3500	CA	ARG	A	445	-8.614	11.392	28.429	1.00	18.49	C
ATOM	3501	C	ARG	A	445	-8.397	9.892	28.555	1.00	19.53	C
ATOM	3502	O	ARG	A	445	-7.514	9.343	27.914	1.00	21.22	O
ATOM	3503	CB	ARG	A	445	-8.758	11.970	29.830	1.00	14.76	C
ATOM	3504	CG	ARG	A	445	-7.643	11.580	30.764	1.00	10.97	C
ATOM	3505	CD	ARG	A	445	-7.994	11.871	32.222	1.00	11.73	C
ATOM	3506	NE	ARG	A	445	-8.114	13.288	32.629	1.00	13.19	N
ATOM	3507	CZ	ARG	A	445	-7.458	14.336	32.122	1.00	9.58	C
ATOM	3508	NH1	ARG	A	445	-6.945	14.323	30.899	1.00	7.80	N1+
ATOM	3509	NH2	ARG	A	445	-7.497	15.482	32.775	1.00	6.22	N
ATOM	3510	N	MET	A	446	-9.204	9.204	29.348	1.00	20.28	N
ATOM	3511	CA	MET	A	446	-8.894	7.805	29.608	1.00	22.11	C
ATOM	3512	C	MET	A	446	-8.796	6.892	28.368	1.00	21.20	C
ATOM	3513	O	MET	A	446	-7.843	6.105	28.273	1.00	21.62	O
ATOM	3514	CB	MET	A	446	-9.830	7.188	30.659	1.00	22.74	C
ATOM	3515	CG	MET	A	446	-9.620	5.693	30.794	1.00	24.58	C
ATOM	3516	SD	MET	A	446	-9.860	4.949	32.408	1.00	28.20	S
ATOM	3517	CE	MET	A	446	-11.076	3.660	31.945	1.00	22.67	C
ATOM	3518	N	PRO	A	447	-9.733	6.979	27.405	1.00	20.32	N
ATOM	3519	CA	PRO	A	447	-9.574	6.042	26.294	1.00	22.10	C
ATOM	3520	C	PRO	A	447	-8.133	6.079	25.772	1.00	23.45	C
ATOM	3521	O	PRO	A	447	-7.541	5.014	25.563	1.00	25.75	O
ATOM	3522	CB	PRO	A	447	-10.578	6.532	25.234	1.00	21.91	C
ATOM	3523	CG	PRO	A	447	-11.561	7.311	25.970	1.00	20.33	C
ATOM	3524	CD	PRO	A	447	-10.792	7.962	27.113	1.00	22.51	C
ATOM	3525	N	CYS	A	448	-7.509	7.266	25.813	1.00	21.39	N
ATOM	3526	CA	CYS	A	448	-6.156	7.436	25.279	1.00	19.05	C
ATOM	3527	C	CYS	A	448	-5.183	6.767	26.222	1.00	18.85	C
ATOM	3528	O	CYS	A	448	-4.317	6.025	25.775	1.00	21.92	O
ATOM	3529	CB	CYS	A	448	-5.756	8.916	25.173	1.00	19.04	C
ATOM	3530	SG	CYS	A	448	-4.591	9.295	26.505	1.00	20.87	S
ATOM	3531	N	ALA	A	449	-5.386	6.971	27.527	1.00	17.31	N
ATOM	3532	CA	ALA	A	449	-4.314	6.924	28.522	1.00	13.97	C
ATOM	3533	C	ALA	A	449	-4.209	5.679	29.390	1.00	16.06	C
ATOM	3534	O	ALA	A	449	-3.241	5.544	30.100	1.00	20.40	O
ATOM	3535	CB	ALA	A	449	-4.376	8.142	29.409	1.00	10.09	C
ATOM	3536	N	GLU	A	450	-5.188	4.780	29.374	1.00	17.26	N
ATOM	3537	CA	GLU	A	450	-4.941	3.417	29.855	1.00	16.55	C
ATOM	3538	C	GLU	A	450	-4.304	2.693	28.672	1.00	18.65	C
ATOM	3539	O	GLU	A	450	-3.139	2.330	28.712	1.00	18.04	O
ATOM	3540	CB	GLU	A	450	-6.245	2.725	30.241	1.00	17.28	C
ATOM	3541	CG	GLU	A	450	-6.151	1.924	31.533	1.00	15.50	C
ATOM	3542	CD	GLU	A	450	-7.098	0.716	31.585	1.00	18.82	C
ATOM	3543	OE1	GLU	A	450	-8.213	0.768	31.027	1.00	17.57	O
ATOM	3544	OE2	GLU	A	450	-6.726	-0.310	32.195	1.00	21.24	O1-
ATOM	3545	N	ASP	A	451	-4.985	2.799	27.531	1.00	19.88	N
ATOM	3546	CA	ASP	A	451	-4.495	2.392	26.213	1.00	18.66	C
ATOM	3547	C	ASP	A	451	-3.055	2.711	25.815	1.00	18.58	C

ATOM	3548	O	ASP	A	451	-2.341	1.810	25.397	1.00	20.61	O
ATOM	3549	CB	ASP	A	451	-5.435	2.927	25.140	1.00	17.00	C
ATOM	3550	CG	ASP	A	451	-6.675	2.088	25.009	1.00	19.38	C
ATOM	3551	OD1	ASP	A	451	-6.556	0.869	25.262	1.00	16.86	O
ATOM	3552	OD2	ASP	A	451	-7.762	2.634	24.690	1.00	19.70	O1-
ATOM	3553	N	TYR	A	452	-2.658	3.981	25.827	1.00	16.13	N
ATOM	3554	CA	TYR	A	452	-1.281	4.344	25.489	1.00	15.08	C
ATOM	3555	C	TYR	A	452	-0.335	3.655	26.464	1.00	16.14	C
ATOM	3556	O	TYR	A	452	0.481	2.837	26.070	1.00	17.95	O
ATOM	3557	CB	TYR	A	452	-1.093	5.854	25.560	1.00	13.93	C
ATOM	3558	CG	TYR	A	452	0.277	6.331	25.144	1.00	15.16	C
ATOM	3559	CD1	TYR	A	452	1.381	6.207	25.995	1.00	13.94	C
ATOM	3560	CD2	TYR	A	452	0.463	6.960	23.919	1.00	15.41	C
ATOM	3561	CE1	TYR	A	452	2.634	6.698	25.624	1.00	13.09	C
ATOM	3562	CE2	TYR	A	452	1.706	7.450	23.550	1.00	15.00	C
ATOM	3563	CZ	TYR	A	452	2.779	7.318	24.401	1.00	12.67	C
ATOM	3564	OH	TYR	A	452	3.973	7.861	24.029	1.00	11.49	O
ATOM	3565	N	LEU	A	453	-0.498	3.931	27.751	1.00	16.23	N
ATOM	3566	CA	LEU	A	453	0.196	3.200	28.794	1.00	13.79	C
ATOM	3567	C	LEU	A	453	0.231	1.710	28.457	1.00	13.05	C
ATOM	3568	O	LEU	A	453	1.301	1.125	28.413	1.00	15.56	O
ATOM	3569	CB	LEU	A	453	-0.502	3.427	30.135	1.00	11.83	C
ATOM	3570	CG	LEU	A	453	0.131	4.454	31.073	1.00	13.55	C
ATOM	3571	CD1	LEU	A	453	-0.933	5.105	31.932	1.00	11.05	C
ATOM	3572	CD2	LEU	A	453	1.178	3.782	31.944	1.00	10.99	C
ATOM	3573	N	SER	A	454	-0.879	1.181	27.955	1.00	11.72	N
ATOM	3574	CA	SER	A	454	-0.980	-0.244	27.649	1.00	11.87	C
ATOM	3575	C	SER	A	454	-0.003	-0.699	26.557	1.00	12.13	C
ATOM	3576	O	SER	A	454	0.518	-1.825	26.598	1.00	8.69	O
ATOM	3577	CB	SER	A	454	-2.408	-0.605	27.220	1.00	14.00	C
ATOM	3578	OG	SER	A	454	-3.390	0.232	27.809	1.00	11.75	O
ATOM	3579	N	VAL	A	455	0.155	0.154	25.543	1.00	11.63	N
ATOM	3580	CA	VAL	A	455	1.107	-0.046	24.450	1.00	10.07	C
ATOM	3581	C	VAL	A	455	2.516	-0.105	25.015	1.00	11.00	C
ATOM	3582	O	VAL	A	455	3.288	-0.996	24.675	1.00	10.74	O
ATOM	3583	CB	VAL	A	455	1.075	1.128	23.425	1.00	11.18	C
ATOM	3584	CG1	VAL	A	455	2.127	0.913	22.352	1.00	10.50	C
ATOM	3585	CG2	VAL	A	455	-0.299	1.283	22.809	1.00	6.79	C
ATOM	3586	N	VAL	A	456	2.858	0.864	25.861	1.00	12.33	N
ATOM	3587	CA	VAL	A	456	4.227	1.008	26.324	1.00	15.30	C
ATOM	3588	C	VAL	A	456	4.669	-0.208	27.125	1.00	18.48	C
ATOM	3589	O	VAL	A	456	5.671	-0.858	26.797	1.00	21.87	O
ATOM	3590	CB	VAL	A	456	4.399	2.248	27.164	1.00	13.68	C
ATOM	3591	CG1	VAL	A	456	5.777	2.285	27.727	1.00	14.03	C
ATOM	3592	CG2	VAL	A	456	4.167	3.460	26.316	1.00	17.71	C
ATOM	3593	N	LEU	A	457	3.867	-0.585	28.110	1.00	18.16	N
ATOM	3594	CA	LEU	A	457	4.124	-1.806	28.837	1.00	17.51	C
ATOM	3595	C	LEU	A	457	4.406	-2.967	27.856	1.00	19.56	C
ATOM	3596	O	LEU	A	457	5.322	-3.758	28.077	1.00	23.05	O
ATOM	3597	CB	LEU	A	457	2.943	-2.096	29.782	1.00	14.10	C
ATOM	3598	CG	LEU	A	457	3.038	-1.457	31.183	1.00	10.11	C
ATOM	3599	CD1	LEU	A	457	3.844	-0.180	31.147	1.00	6.96	C
ATOM	3600	CD2	LEU	A	457	1.668	-1.183	31.723	1.00	6.91	C
ATOM	3601	N	ASN	A	458	3.820	-2.914	26.666	1.00	19.26	N
ATOM	3602	CA	ASN	A	458	4.044	-3.982	25.696	1.00	20.09	C
ATOM	3603	C	ASN	A	458	5.403	-3.848	25.054	1.00	20.20	C
ATOM	3604	O	ASN	A	458	6.144	-4.823	25.000	1.00	22.87	O
ATOM	3605	CB	ASN	A	458	2.967	-3.985	24.622	1.00	22.45	C
ATOM	3606	CG	ASN	A	458	3.165	-5.070	23.594	1.00	23.30	C
ATOM	3607	ND2	ASN	A	458	3.201	-4.665	22.348	1.00	27.57	N
ATOM	3608	OD1	ASN	A	458	3.122	-6.263	23.895	1.00	25.73	O
ATOM	3609	N	GLN	A	459	5.782	-2.627	24.683	1.00	18.71	N
ATOM	3610	CA	GLN	A	459	7.156	-2.341	24.284	1.00	16.79	C
ATOM	3611	C	GLN	A	459	8.104	-2.947	25.318	1.00	19.53	C
ATOM	3612	O	GLN	A	459	8.829	-3.897	25.000	1.00	20.10	O
ATOM	3613	CB	GLN	A	459	7.375	-0.850	24.212	1.00	16.06	C
ATOM	3614	CG	GLN	A	459	8.559	-0.451	23.411	1.00	19.00	C
ATOM	3615	CD	GLN	A	459	8.212	-0.265	21.970	1.00	18.86	C
ATOM	3616	NE2	GLN	A	459	7.618	0.865	21.647	1.00	18.61	N
ATOM	3617	OE1	GLN	A	459	8.431	-1.150	21.156	1.00	20.77	O
ATOM	3618	N	LEU	A	460	7.894	-2.591	26.591	1.00	19.18	N

ATOM	3619	CA	LEU	A	460	8.570	-3.248	27.725	1.00	17.82	C
ATOM	3620	C	LEU	A	460	8.632	-4.768	27.635	1.00	18.45	C
ATOM	3621	O	LEU	A	460	9.692	-5.338	27.877	1.00	21.46	O
ATOM	3622	CB	LEU	A	460	7.919	-2.860	29.063	1.00	15.63	C
ATOM	3623	CG	LEU	A	460	8.279	-3.617	30.355	1.00	14.04	C
ATOM	3624	CD1	LEU	A	460	9.785	-3.769	30.501	1.00	15.77	C
ATOM	3625	CD2	LEU	A	460	7.747	-2.867	31.555	1.00	12.12	C
ATOM	3626	N	CYS	A	461	7.513	-5.430	27.330	1.00	20.02	N
ATOM	3627	CA	CYS	A	461	7.470	-6.904	27.322	1.00	20.16	C
ATOM	3628	C	CYS	A	461	8.172	-7.527	26.121	1.00	21.18	C
ATOM	3629	O	CYS	A	461	8.929	-8.505	26.272	1.00	19.43	O
ATOM	3630	CB	CYS	A	461	6.028	-7.408	27.348	1.00	17.64	C
ATOM	3631	SG	CYS	A	461	5.081	-6.878	28.795	1.00	17.61	S
ATOM	3632	N	VAL	A	462	7.942	-6.920	24.950	1.00	21.46	N
ATOM	3633	CA	VAL	A	462	8.437	-7.401	23.660	1.00	22.27	C
ATOM	3634	C	VAL	A	462	9.942	-7.136	23.468	1.00	23.83	C
ATOM	3635	O	VAL	A	462	10.679	-7.973	22.924	1.00	22.80	O
ATOM	3636	CB	VAL	A	462	7.672	-6.738	22.517	1.00	20.37	C
ATOM	3637	CG1	VAL	A	462	6.179	-6.891	22.734	1.00	20.18	C
ATOM	3638	CG2	VAL	A	462	8.039	-5.304	22.420	1.00	17.82	C
ATOM	3639	N	LEU	A	463	10.358	-5.933	23.863	1.00	24.45	N
ATOM	3640	CA	LEU	A	463	11.749	-5.617	24.183	1.00	23.28	C
ATOM	3641	C	LEU	A	463	12.444	-6.794	24.843	1.00	23.88	C
ATOM	3642	O	LEU	A	463	13.285	-7.448	24.233	1.00	25.91	O
ATOM	3643	CB	LEU	A	463	11.800	-4.420	25.144	1.00	20.02	C
ATOM	3644	CG	LEU	A	463	12.855	-3.340	24.952	1.00	16.71	C
ATOM	3645	CD1	LEU	A	463	13.665	-3.676	23.734	1.00	14.34	C
ATOM	3646	CD2	LEU	A	463	12.196	-1.970	24.804	1.00	15.27	C
ATOM	3647	N	HIS	A	464	12.115	-7.035	26.106	1.00	25.21	N
ATOM	3648	CA	HIS	A	464	12.941	-7.887	26.951	1.00	27.10	C
ATOM	3649	C	HIS	A	464	12.269	-9.220	27.310	1.00	25.73	C
ATOM	3650	O	HIS	A	464	11.668	-9.364	28.380	1.00	26.56	O
ATOM	3651	CB	HIS	A	464	13.392	-7.121	28.224	1.00	27.53	C
ATOM	3652	CG	HIS	A	464	14.883	-7.158	28.474	1.00	26.94	C
ATOM	3653	CD2	HIS	A	464	15.904	-7.678	27.738	1.00	21.05	C
ATOM	3654	ND1	HIS	A	464	15.464	-6.665	29.625	1.00	24.27	N
ATOM	3655	CE1	HIS	A	464	16.764	-6.892	29.600	1.00	20.67	C
ATOM	3656	NE2	HIS	A	464	17.053	-7.502	28.464	1.00	17.48	N
ATOM	3657	N	GLU	A	465	12.180	-10.082	26.305	1.00	23.46	N
ATOM	3658	CA	GLU	A	465	12.280	-11.518	26.492	1.00	21.43	C
ATOM	3659	C	GLU	A	465	13.764	-11.787	26.213	1.00	21.62	C
ATOM	3660	O	GLU	A	465	14.509	-12.216	27.092	1.00	20.90	O
ATOM	3661	CB	GLU	A	465	11.406	-12.258	25.458	1.00	23.62	C
ATOM	3662	CG	GLU	A	465	9.867	-12.214	25.681	1.00	20.17	C
ATOM	3663	CD	GLU	A	465	9.063	-12.794	24.503	1.00	18.19	C
ATOM	3664	OE1	GLU	A	465	8.978	-12.111	23.465	1.00	15.65	O
ATOM	3665	OE2	GLU	A	465	8.455	-13.888	24.626	1.00	15.39	O1-
ATOM	3666	N	LYS	A	466	14.199	-11.367	25.024	1.00	22.56	N
ATOM	3667	CA	LYS	A	466	15.611	-11.327	24.604	1.00	24.39	C
ATOM	3668	C	LYS	A	466	16.664	-11.640	25.685	1.00	21.61	C
ATOM	3669	O	LYS	A	466	17.404	-12.606	25.542	1.00	22.78	O
ATOM	3670	CB	LYS	A	466	15.899	-9.967	23.918	1.00	26.20	C
ATOM	3671	CG	LYS	A	466	17.381	-9.571	23.804	1.00	27.48	C
ATOM	3672	CD	LYS	A	466	17.668	-8.239	24.520	1.00	26.14	C
ATOM	3673	CE	LYS	A	466	19.123	-7.796	24.343	1.00	23.78	C
ATOM	3674	NZ	LYS	A	466	20.084	-8.644	25.115	1.00	20.55	N1+
ATOM	3675	N	THR	A	467	16.826	-10.776	26.681	1.00	19.96	N
ATOM	3676	CA	THR	A	467	17.514	-11.183	27.914	1.00	22.51	C
ATOM	3677	C	THR	A	467	16.397	-11.294	28.923	1.00	25.70	C
ATOM	3678	O	THR	A	467	15.585	-10.359	29.041	1.00	29.10	O
ATOM	3679	CB	THR	A	467	18.489	-10.112	28.487	1.00	16.74	C
ATOM	3680	CG2	THR	A	467	19.829	-10.712	28.809	1.00	14.95	C
ATOM	3681	OG1	THR	A	467	18.653	-9.056	27.550	1.00	14.94	O
ATOM	3682	N	PRO	A	468	16.405	-12.344	29.752	1.00	25.15	N
ATOM	3683	CA	PRO	A	468	15.248	-12.352	30.645	1.00	26.23	C
ATOM	3684	C	PRO	A	468	15.654	-11.886	32.035	1.00	25.34	C
ATOM	3685	O	PRO	A	468	16.667	-12.324	32.567	1.00	24.12	O
ATOM	3686	CB	PRO	A	468	14.786	-13.809	30.609	1.00	27.92	C
ATOM	3687	CG	PRO	A	468	15.621	-14.461	29.496	1.00	26.78	C
ATOM	3688	CD	PRO	A	468	16.904	-13.702	29.528	1.00	23.56	C
ATOM	3689	N	VAL	A	469	14.900	-10.945	32.589	1.00	26.09	N

ATOM	3690	CA	VAL	A	469	15.269	-10.322	33.863	1.00	26.57	C
ATOM	3691	C	VAL	A	469	14.259	-10.507	35.043	1.00	26.29	C
ATOM	3692	O	VAL	A	469	14.272	-11.537	35.720	1.00	25.05	O
ATOM	3693	CB	VAL	A	469	15.609	-8.808	33.643	1.00	25.96	C
ATOM	3694	CG1	VAL	A	469	17.067	-8.663	33.262	1.00	23.63	C
ATOM	3695	CG2	VAL	A	469	14.723	-8.211	32.541	1.00	22.41	C
ATOM	3696	N	SER	A	470	13.398	-9.520	35.283	1.00	24.94	N
ATOM	3697	CA	SER	A	470	12.584	-9.486	36.492	1.00	25.10	C
ATOM	3698	C	SER	A	470	11.436	-10.470	36.378	1.00	26.22	C
ATOM	3699	O	SER	A	470	10.438	-10.196	35.697	1.00	27.50	O
ATOM	3700	CB	SER	A	470	12.021	-8.070	36.744	1.00	24.74	C
ATOM	3701	OG	SER	A	470	11.640	-7.884	38.110	1.00	22.77	O
ATOM	3702	N	ASP	A	471	11.516	-11.553	37.145	1.00	25.67	N
ATOM	3703	CA	ASP	A	471	10.504	-12.596	37.091	1.00	25.01	C
ATOM	3704	C	ASP	A	471	9.126	-11.976	37.245	1.00	26.17	C
ATOM	3705	O	ASP	A	471	8.146	-12.438	36.640	1.00	27.11	O
ATOM	3706	CB	ASP	A	471	10.765	-13.620	38.175	1.00	23.33	C
ATOM	3707	CG	ASP	A	471	12.078	-14.320	37.978	1.00	25.27	C
ATOM	3708	OD1	ASP	A	471	13.125	-13.757	38.359	1.00	29.79	O
ATOM	3709	OD2	ASP	A	471	12.086	-15.384	37.335	1.00	29.40	O1-
ATOM	3710	N	ARG	A	472	9.108	-10.793	37.853	1.00	25.75	N
ATOM	3711	CA	ARG	A	472	7.884	-10.014	37.949	1.00	26.02	C
ATOM	3712	C	ARG	A	472	7.420	-9.534	36.583	1.00	26.00	C
ATOM	3713	O	ARG	A	472	6.279	-9.785	36.182	1.00	26.81	O
ATOM	3714	CB	ARG	A	472	8.098	-8.836	38.897	1.00	25.19	C
ATOM	3715	CG	ARG	A	472	8.527	-9.296	40.283	1.00	24.67	C
ATOM	3716	CD	ARG	A	472	7.413	-9.145	41.277	1.00	20.81	C
ATOM	3717	NE	ARG	A	472	7.918	-8.558	42.510	1.00	15.73	N
ATOM	3718	CZ	ARG	A	472	7.177	-7.901	43.390	1.00	15.03	C
ATOM	3719	NH1	ARG	A	472	5.946	-7.542	43.087	1.00	15.14	N1+
ATOM	3720	NH2	ARG	A	472	7.720	-7.494	44.523	1.00	16.85	N
ATOM	3721	N	VAL	A	473	8.323	-8.888	35.853	1.00	24.83	N
ATOM	3722	CA	VAL	A	473	8.029	-8.415	34.512	1.00	23.45	C
ATOM	3723	C	VAL	A	473	7.641	-9.624	33.669	1.00	22.85	C
ATOM	3724	O	VAL	A	473	6.743	-9.554	32.840	1.00	22.94	O
ATOM	3725	CB	VAL	A	473	9.259	-7.717	33.873	1.00	25.33	C
ATOM	3726	CG1	VAL	A	473	8.869	-7.093	32.530	1.00	23.20	C
ATOM	3727	CG2	VAL	A	473	9.845	-6.670	34.828	1.00	19.55	C
ATOM	3728	N	THR	A	474	8.260	-10.755	33.947	1.00	21.09	N
ATOM	3729	CA	THR	A	474	7.847	-11.976	33.298	1.00	24.95	C
ATOM	3730	C	THR	A	474	6.372	-12.199	33.594	1.00	25.61	C
ATOM	3731	O	THR	A	474	5.565	-12.398	32.675	1.00	27.28	O
ATOM	3732	CB	THR	A	474	8.647	-13.169	33.829	1.00	27.15	C
ATOM	3733	CG2	THR	A	474	8.638	-14.329	32.811	1.00	28.51	C
ATOM	3734	OG1	THR	A	474	9.997	-12.748	34.084	1.00	29.10	O
ATOM	3735	N	LYS	A	475	6.000	-12.011	34.856	1.00	26.00	N
ATOM	3736	CA	LYS	A	475	4.657	-12.344	35.320	1.00	24.30	C
ATOM	3737	C	LYS	A	475	3.533	-11.428	34.798	1.00	21.93	C
ATOM	3738	O	LYS	A	475	2.528	-11.951	34.305	1.00	20.33	O
ATOM	3739	CB	LYS	A	475	4.636	-12.427	36.858	1.00	25.66	C
ATOM	3740	CG	LYS	A	475	4.745	-13.872	37.436	1.00	27.40	C
ATOM	3741	CD	LYS	A	475	6.131	-14.541	37.206	1.00	29.53	C
ATOM	3742	CE	LYS	A	475	6.706	-15.275	38.468	1.00	27.50	C
ATOM	3743	NZ	LYS	A	475	7.235	-14.367	39.560	1.00	20.78	N1+
ATOM	3744	N	CYS	A	476	3.730	-10.098	34.805	1.00	18.81	N
ATOM	3745	CA	CYS	A	476	2.672	-9.129	34.411	1.00	14.74	C
ATOM	3746	C	CYS	A	476	2.446	-9.020	32.891	1.00	14.14	C
ATOM	3747	O	CYS	A	476	1.340	-8.728	32.413	1.00	10.01	O
ATOM	3748	CB	CYS	A	476	2.973	-7.735	34.969	1.00	14.71	C
ATOM	3749	SG	CYS	A	476	2.665	-7.476	36.756	1.00	17.94	S
ATOM	3750	N	CYS	A	477	3.502	-9.291	32.135	1.00	14.05	N
ATOM	3751	CA	CYS	A	477	3.383	-9.530	30.702	1.00	12.13	C
ATOM	3752	C	CYS	A	477	2.553	-10.798	30.380	1.00	11.06	C
ATOM	3753	O	CYS	A	477	1.395	-10.686	29.966	1.00	6.49	O
ATOM	3754	CB	CYS	A	477	4.794	-9.588	30.090	1.00	13.42	C
ATOM	3755	SG	CYS	A	477	5.744	-8.034	30.324	1.00	14.64	S
ATOM	3756	N	THR	A	478	3.070	-11.969	30.755	1.00	11.58	N
ATOM	3757	CA	THR	A	478	2.425	-13.263	30.481	1.00	14.89	C
ATOM	3758	C	THR	A	478	1.027	-13.474	31.033	1.00	15.80	C
ATOM	3759	O	THR	A	478	0.194	-14.100	30.369	1.00	16.44	O
ATOM	3760	CB	THR	A	478	3.241	-14.447	31.035	1.00	18.24	C

ATOM	3761	CG2	THR	A	478	3.479	-14.300	32.546	1.00	16.23	C
ATOM	3762	OG1	THR	A	478	2.514	-15.661	30.807	1.00	19.21	O
ATOM	3763	N	GLU	A	479	0.903	-13.261	32.343	1.00	15.82	N
ATOM	3764	CA	GLU	A	479	-0.286	-13.641	33.070	1.00	18.03	C
ATOM	3765	C	GLU	A	479	-1.524	-12.993	32.455	1.00	19.17	C
ATOM	3766	O	GLU	A	479	-2.474	-13.703	32.167	1.00	20.64	O
ATOM	3767	CB	GLU	A	479	-0.144	-13.319	34.572	1.00	20.48	C
ATOM	3768	CG	GLU	A	479	0.926	-14.185	35.346	1.00	25.02	C
ATOM	3769	CD	GLU	A	479	0.428	-15.556	35.910	1.00	26.36	C
ATOM	3770	OE1	GLU	A	479	-0.438	-15.569	36.819	1.00	27.61	O
ATOM	3771	OE2	GLU	A	479	1.014	-16.614	35.558	1.00	23.89	O1-
ATOM	3772	N	SER	A	480	-1.476	-11.697	32.129	1.00	21.19	N
ATOM	3773	CA	SER	A	480	-2.479	-11.102	31.229	1.00	23.00	C
ATOM	3774	C	SER	A	480	-2.032	-9.944	30.320	1.00	22.37	C
ATOM	3775	O	SER	A	480	-1.343	-9.022	30.768	1.00	23.67	O
ATOM	3776	CB	SER	A	480	-3.703	-10.633	32.019	1.00	25.73	C
ATOM	3777	OG	SER	A	480	-4.717	-10.096	31.159	1.00	24.90	O
ATOM	3778	N	LEU	A	481	-2.642	-9.900	29.133	1.00	18.32	N
ATOM	3779	CA	LEU	A	481	-2.721	-8.692	28.306	1.00	17.04	C
ATOM	3780	C	LEU	A	481	-3.581	-7.681	29.029	1.00	16.84	C
ATOM	3781	O	LEU	A	481	-3.162	-6.563	29.292	1.00	16.88	O
ATOM	3782	CB	LEU	A	481	-3.392	-8.992	26.950	1.00	12.89	C
ATOM	3783	CG	LEU	A	481	-3.438	-7.943	25.831	1.00	8.60	C
ATOM	3784	CD1	LEU	A	481	-2.107	-7.944	25.173	1.00	11.20	C
ATOM	3785	CD2	LEU	A	481	-4.510	-8.235	24.771	1.00	2.00	C
ATOM	3786	N	VAL	A	482	-4.791	-8.109	29.364	1.00	18.70	N
ATOM	3787	CA	VAL	A	482	-5.873	-7.205	29.741	1.00	17.38	C
ATOM	3788	C	VAL	A	482	-5.656	-6.631	31.146	1.00	15.41	C
ATOM	3789	O	VAL	A	482	-6.034	-5.490	31.420	1.00	12.39	O
ATOM	3790	CB	VAL	A	482	-7.235	-7.944	29.665	1.00	19.15	C
ATOM	3791	CG1	VAL	A	482	-8.371	-6.944	29.602	1.00	16.59	C
ATOM	3792	CG2	VAL	A	482	-7.262	-8.910	28.452	1.00	14.21	C
ATOM	3793	N	ASN	A	483	-4.887	-7.349	31.962	1.00	15.51	N
ATOM	3794	CA	ASN	A	483	-4.543	-6.871	33.313	1.00	19.45	C
ATOM	3795	C	ASN	A	483	-3.117	-6.282	33.448	1.00	18.86	C
ATOM	3796	O	ASN	A	483	-2.541	-6.286	34.527	1.00	18.09	O
ATOM	3797	CB	ASN	A	483	-4.744	-7.999	34.349	1.00	20.35	C
ATOM	3798	CG	ASN	A	483	-6.101	-8.689	34.212	1.00	23.29	C
ATOM	3799	ND2	ASN	A	483	-7.134	-8.065	34.770	1.00	23.14	N
ATOM	3800	OD1	ASN	A	483	-6.232	-9.728	33.544	1.00	20.79	O
ATOM	3801	N	ARG	A	484	-2.627	-5.632	32.400	1.00	19.94	N
ATOM	3802	CA	ARG	A	484	-1.235	-5.195	32.348	1.00	18.62	C
ATOM	3803	C	ARG	A	484	-1.091	-4.010	33.255	1.00	16.95	C
ATOM	3804	O	ARG	A	484	-0.397	-4.077	34.247	1.00	15.09	O
ATOM	3805	CB	ARG	A	484	-0.844	-4.773	30.920	1.00	22.74	C
ATOM	3806	CG	ARG	A	484	0.231	-5.615	30.212	1.00	18.99	C
ATOM	3807	CD	ARG	A	484	0.209	-5.384	28.687	1.00	16.43	C
ATOM	3808	NE	ARG	A	484	1.293	-6.102	28.008	1.00	17.41	N
ATOM	3809	CZ	ARG	A	484	1.157	-7.231	27.313	1.00	16.27	C
ATOM	3810	NH1	ARG	A	484	-0.025	-7.784	27.149	1.00	17.18	N1+
ATOM	3811	NH2	ARG	A	484	2.216	-7.812	26.767	1.00	20.22	N
ATOM	3812	N	ARG	A	485	-1.868	-2.973	32.992	1.00	17.31	N
ATOM	3813	CA	ARG	A	485	-1.641	-1.679	33.626	1.00	19.94	C
ATOM	3814	C	ARG	A	485	-2.259	-1.408	35.051	1.00	22.79	C
ATOM	3815	O	ARG	A	485	-1.991	-0.351	35.670	1.00	22.25	O
ATOM	3816	CB	ARG	A	485	-2.043	-0.583	32.637	1.00	16.29	C
ATOM	3817	CG	ARG	A	485	-1.603	0.799	33.039	1.00	16.70	C
ATOM	3818	CD	ARG	A	485	-2.801	1.708	33.276	1.00	15.57	C
ATOM	3819	NE	ARG	A	485	-3.930	1.020	33.887	1.00	12.17	N
ATOM	3820	CZ	ARG	A	485	-4.215	1.091	35.173	1.00	11.81	C
ATOM	3821	NH1	ARG	A	485	-3.411	1.751	35.978	1.00	15.13	N1+
ATOM	3822	NH2	ARG	A	485	-5.192	0.371	35.680	1.00	12.58	N
ATOM	3823	N	PRO	A	486	-3.067	-2.350	35.598	1.00	22.59	N
ATOM	3824	CA	PRO	A	486	-3.024	-2.488	37.067	1.00	23.53	C
ATOM	3825	C	PRO	A	486	-2.092	-3.558	37.639	1.00	21.48	C
ATOM	3826	O	PRO	A	486	-2.263	-3.997	38.779	1.00	18.78	O
ATOM	3827	CB	PRO	A	486	-4.489	-2.756	37.448	1.00	23.69	C
ATOM	3828	CG	PRO	A	486	-5.101	-3.264	36.224	1.00	19.85	C
ATOM	3829	CD	PRO	A	486	-4.446	-2.530	35.110	1.00	22.51	C
ATOM	3830	N	CYS	A	487	-1.118	-3.982	36.846	1.00	19.53	N
ATOM	3831	CA	CYS	A	487	-0.170	-4.986	37.304	1.00	19.20	C

ATOM	3832	C	CYS	A	487	1.135	-4.343	37.720	1.00	20.85	C
ATOM	3833	O	CYS	A	487	1.389	-4.179	38.908	1.00	24.17	O
ATOM	3834	CB	CYS	A	487	0.102	-6.004	36.223	1.00	15.12	C
ATOM	3835	SG	CYS	A	487	0.659	-7.543	36.947	1.00	12.46	S
ATOM	3836	N	PHE	A	488	1.882	-3.834	36.745	1.00	21.06	N
ATOM	3837	CA	PHE	A	488	3.057	-3.030	37.018	1.00	16.19	C
ATOM	3838	C	PHE	A	488	2.761	-2.078	38.133	1.00	16.14	C
ATOM	3839	O	PHE	A	488	3.334	-2.231	39.193	1.00	16.21	O
ATOM	3840	CB	PHE	A	488	3.487	-2.282	35.767	1.00	15.68	C
ATOM	3841	CG	PHE	A	488	4.434	-3.072	34.917	1.00	18.17	C
ATOM	3842	CD1	PHE	A	488	3.953	-4.049	34.066	1.00	14.32	C
ATOM	3843	CD2	PHE	A	488	5.800	-3.027	35.173	1.00	15.88	C
ATOM	3844	CE1	PHE	A	488	4.799	-4.961	33.530	1.00	13.05	C
ATOM	3845	CE2	PHE	A	488	6.638	-3.937	34.632	1.00	7.89	C
ATOM	3846	CZ	PHE	A	488	6.142	-4.907	33.821	1.00	11.30	C
ATOM	3847	N	SER	A	489	1.648	-1.356	37.989	1.00	16.65	N
ATOM	3848	CA	SER	A	489	1.124	-0.449	39.020	1.00	14.57	C
ATOM	3849	C	SER	A	489	1.020	-1.124	40.400	1.00	14.49	C
ATOM	3850	O	SER	A	489	1.604	-0.644	41.368	1.00	14.95	O
ATOM	3851	CB	SER	A	489	-0.261	0.084	38.606	1.00	13.40	C
ATOM	3852	OG	SER	A	489	-0.220	0.832	37.402	1.00	9.27	O
ATOM	3853	N	ALA	A	490	0.329	-2.264	40.471	1.00	14.36	N
ATOM	3854	CA	ALA	A	490	0.018	-2.922	41.746	1.00	14.42	C
ATOM	3855	C	ALA	A	490	1.174	-3.786	42.177	1.00	15.92	C
ATOM	3856	O	ALA	A	490	1.016	-4.996	42.395	1.00	16.03	O
ATOM	3857	CB	ALA	A	490	-1.233	-3.764	41.628	1.00	14.31	C
ATOM	3858	N	LEU	A	491	2.275	-3.111	42.483	1.00	16.50	N
ATOM	3859	CA	LEU	A	491	3.582	-3.730	42.630	1.00	17.68	C
ATOM	3860	C	LEU	A	491	4.264	-2.722	43.515	1.00	18.16	C
ATOM	3861	O	LEU	A	491	4.181	-1.532	43.235	1.00	19.45	O
ATOM	3862	CB	LEU	A	491	4.274	-3.755	41.260	1.00	18.42	C
ATOM	3863	CG	LEU	A	491	5.176	-4.844	40.673	1.00	19.23	C
ATOM	3864	CD1	LEU	A	491	4.410	-6.103	40.303	1.00	19.20	C
ATOM	3865	CD2	LEU	A	491	5.816	-4.257	39.436	1.00	21.21	C
ATOM	3866	N	GLU	A	492	4.742	-3.138	44.677	1.00	17.64	N
ATOM	3867	CA	GLU	A	492	5.441	-2.176	45.526	1.00	20.34	C
ATOM	3868	C	GLU	A	492	6.920	-2.316	45.191	1.00	20.14	C
ATOM	3869	O	GLU	A	492	7.255	-2.927	44.186	1.00	18.77	O
ATOM	3870	CB	GLU	A	492	5.143	-2.414	47.033	1.00	20.09	C
ATOM	3871	CG	GLU	A	492	3.620	-2.630	47.374	1.00	24.17	C
ATOM	3872	CD	GLU	A	492	2.836	-1.411	47.983	1.00	25.80	C
ATOM	3873	OE1	GLU	A	492	3.305	-0.784	48.959	1.00	27.22	O
ATOM	3874	OE2	GLU	A	492	1.648	-1.216	47.614	1.00	24.48	O1-
ATOM	3875	N	VAL	A	493	7.786	-1.623	45.924	1.00	21.53	N
ATOM	3876	CA	VAL	A	493	9.231	-1.795	45.779	1.00	20.93	C
ATOM	3877	C	VAL	A	493	9.635	-3.247	46.044	1.00	22.35	C
ATOM	3878	O	VAL	A	493	9.525	-3.722	47.170	1.00	24.31	O
ATOM	3879	CB	VAL	A	493	9.982	-0.910	46.767	1.00	18.51	C
ATOM	3880	CG1	VAL	A	493	11.487	-1.196	46.692	1.00	19.04	C
ATOM	3881	CG2	VAL	A	493	9.666	0.552	46.492	1.00	17.43	C
ATOM	3882	N	ASP	A	494	10.093	-3.951	45.016	1.00	24.29	N
ATOM	3883	CA	ASP	A	494	10.404	-5.382	45.148	1.00	25.27	C
ATOM	3884	C	ASP	A	494	11.691	-5.486	45.946	1.00	23.84	C
ATOM	3885	O	ASP	A	494	12.763	-5.666	45.375	1.00	22.03	O
ATOM	3886	CB	ASP	A	494	10.603	-6.067	43.764	1.00	25.69	C
ATOM	3887	CG	ASP	A	494	9.375	-5.952	42.826	1.00	21.60	C
ATOM	3888	OD1	ASP	A	494	8.405	-5.219	43.111	1.00	20.70	O
ATOM	3889	OD2	ASP	A	494	9.391	-6.593	41.768	1.00	16.55	O1-
ATOM	3890	N	GLU	A	495	11.558	-5.460	47.270	1.00	24.75	N
ATOM	3891	CA	GLU	A	495	12.703	-5.461	48.188	1.00	25.22	C
ATOM	3892	C	GLU	A	495	13.578	-6.701	48.020	1.00	25.09	C
ATOM	3893	O	GLU	A	495	14.671	-6.793	48.586	1.00	23.87	O
ATOM	3894	CB	GLU	A	495	12.229	-5.334	49.644	1.00	25.31	C
ATOM	3895	CG	GLU	A	495	11.358	-4.089	49.951	1.00	22.81	C
ATOM	3896	CD	GLU	A	495	9.976	-4.443	50.509	1.00	23.79	C
ATOM	3897	OE1	GLU	A	495	9.639	-5.650	50.564	1.00	20.96	O
ATOM	3898	OE2	GLU	A	495	9.223	-3.511	50.885	1.00	22.17	O1-
ATOM	3899	N	THR	A	496	13.107	-7.595	47.149	1.00	26.34	N
ATOM	3900	CA	THR	A	496	13.866	-8.694	46.535	1.00	23.22	C
ATOM	3901	C	THR	A	496	15.335	-8.416	46.231	1.00	22.62	C
ATOM	3902	O	THR	A	496	16.150	-9.331	46.277	1.00	22.94	O

ATOM	3903	CB	THR	A	496	13.187	-9.146	45.199	1.00	21.63	C
ATOM	3904	CG2	THR	A	496	12.732	-10.581	45.296	1.00	21.18	C
ATOM	3905	OG1	THR	A	496	12.060	-8.302	44.898	1.00	16.30	O
ATOM	3906	N	TYR	A	497	15.661	-7.150	45.975	1.00	22.20	N
ATOM	3907	CA	TYR	A	497	16.844	-6.768	45.215	1.00	23.14	C
ATOM	3908	C	TYR	A	497	18.148	-7.505	45.559	1.00	25.54	C
ATOM	3909	O	TYR	A	497	18.420	-8.588	45.015	1.00	24.48	O
ATOM	3910	CB	TYR	A	497	17.055	-5.256	45.330	1.00	23.83	C
ATOM	3911	CG	TYR	A	497	17.784	-4.607	44.155	1.00	25.67	C
ATOM	3912	CD1	TYR	A	497	17.903	-5.248	42.939	1.00	26.17	C
ATOM	3913	CD2	TYR	A	497	18.419	-3.381	44.302	1.00	24.70	C
ATOM	3914	CE1	TYR	A	497	18.656	-4.699	41.917	1.00	27.56	C
ATOM	3915	CE2	TYR	A	497	19.163	-2.831	43.293	1.00	24.84	C
ATOM	3916	CZ	TYR	A	497	19.298	-3.496	42.103	1.00	27.12	C
ATOM	3917	OH	TYR	A	497	20.187	-3.028	41.144	1.00	25.38	O
ATOM	3918	N	VAL	A	498	18.915	-6.947	46.504	1.00	26.48	N
ATOM	3919	CA	VAL	A	498	20.386	-7.050	46.515	1.00	25.76	C
ATOM	3920	C	VAL	A	498	20.815	-6.909	45.059	1.00	27.52	C
ATOM	3921	O	VAL	A	498	20.314	-6.011	44.377	1.00	26.89	O
ATOM	3922	CB	VAL	A	498	20.934	-8.371	47.162	1.00	25.41	C
ATOM	3923	CG1	VAL	A	498	22.373	-8.146	47.637	1.00	23.31	C
ATOM	3924	CG2	VAL	A	498	20.075	-8.802	48.361	1.00	25.94	C
ATOM	3925	N	PRO	A	499	21.622	-7.846	44.516	1.00	30.00	N
ATOM	3926	CA	PRO	A	499	22.892	-7.469	43.868	1.00	29.18	C
ATOM	3927	C	PRO	A	499	23.366	-6.065	44.192	1.00	29.84	C
ATOM	3928	O	PRO	A	499	24.553	-5.856	44.419	1.00	32.19	O
ATOM	3929	CB	PRO	A	499	22.589	-7.640	42.383	1.00	29.25	C
ATOM	3930	CG	PRO	A	499	21.521	-8.787	42.353	1.00	31.67	C
ATOM	3931	CD	PRO	A	499	21.046	-9.013	43.821	1.00	29.92	C
ATOM	3932	N	LYS	A	500	22.480	-5.092	44.014	1.00	29.43	N
ATOM	3933	CA	LYS	A	500	22.604	-3.779	44.641	1.00	28.77	C
ATOM	3934	C	LYS	A	500	23.964	-3.178	44.341	1.00	29.16	C
ATOM	3935	O	LYS	A	500	24.597	-2.585	45.213	1.00	31.34	O
ATOM	3936	CB	LYS	A	500	22.376	-3.880	46.153	1.00	25.37	C
ATOM	3937	CG	LYS	A	500	21.848	-2.597	46.770	1.00	23.83	C
ATOM	3938	CD	LYS	A	500	21.013	-2.876	48.001	1.00	24.99	C
ATOM	3939	CE	LYS	A	500	19.991	-3.991	47.712	1.00	29.69	C
ATOM	3940	NZ	LYS	A	500	18.606	-3.820	48.316	1.00	30.96	N1+
ATOM	3941	N	GLU	A	501	24.456	-3.494	43.144	1.00	28.36	N
ATOM	3942	CA	GLU	A	501	25.733	-3.020	42.626	1.00	27.10	C
ATOM	3943	C	GLU	A	501	26.219	-1.775	43.365	1.00	23.87	C
ATOM	3944	O	GLU	A	501	25.440	-0.854	43.611	1.00	24.20	O
ATOM	3945	CB	GLU	A	501	25.583	-2.722	41.120	1.00	28.81	C
ATOM	3946	CG	GLU	A	501	26.853	-2.919	40.279	1.00	27.95	C
ATOM	3947	CD	GLU	A	501	26.979	-4.325	39.717	1.00	26.77	C
ATOM	3948	OE1	GLU	A	501	25.944	-4.926	39.354	1.00	26.88	O
ATOM	3949	OE2	GLU	A	501	28.114	-4.842	39.661	1.00	27.69	O1-
ATOM	3950	N	PHE	A	502	27.466	-1.790	43.799	1.00	19.52	N
ATOM	3951	CA	PHE	A	502	28.068	-0.583	44.320	1.00	21.84	C
ATOM	3952	C	PHE	A	502	29.008	0.086	43.277	1.00	22.82	C
ATOM	3953	O	PHE	A	502	29.712	-0.598	42.551	1.00	24.52	O
ATOM	3954	CB	PHE	A	502	28.827	-0.921	45.617	1.00	22.57	C
ATOM	3955	CG	PHE	A	502	28.007	-0.747	46.897	1.00	24.13	C
ATOM	3956	CD1	PHE	A	502	26.662	-0.372	46.856	1.00	20.81	C
ATOM	3957	CD2	PHE	A	502	28.627	-0.839	48.149	1.00	22.46	C
ATOM	3958	CE1	PHE	A	502	25.976	-0.085	48.030	1.00	19.06	C
ATOM	3959	CE2	PHE	A	502	27.937	-0.544	49.329	1.00	18.64	C
ATOM	3960	CZ	PHE	A	502	26.621	-0.165	49.266	1.00	19.92	C
ATOM	3961	N	ASN	A	503	28.876	1.392	43.069	1.00	22.88	N
ATOM	3962	CA	ASN	A	503	30.017	2.214	42.668	1.00	24.10	C
ATOM	3963	C	ASN	A	503	30.509	2.157	41.188	1.00	25.87	C
ATOM	3964	O	ASN	A	503	31.690	2.401	40.905	1.00	24.39	O
ATOM	3965	CB	ASN	A	503	31.167	1.906	43.630	1.00	24.77	C
ATOM	3966	CG	ASN	A	503	30.765	2.064	45.094	1.00	25.30	C
ATOM	3967	ND2	ASN	A	503	31.270	1.181	45.961	1.00	25.44	N
ATOM	3968	OD1	ASN	A	503	30.024	2.978	45.442	1.00	26.75	O
ATOM	3969	N	ALA	A	504	29.564	2.196	40.254	1.00	28.88	N
ATOM	3970	CA	ALA	A	504	29.804	1.734	38.874	1.00	31.13	C
ATOM	3971	C	ALA	A	504	30.300	2.776	37.823	1.00	31.37	C
ATOM	3972	O	ALA	A	504	29.549	3.108	36.885	1.00	29.77	O
ATOM	3973	CB	ALA	A	504	28.522	1.003	38.351	1.00	29.20	C

ATOM	3974	N	GLU	A	505	31.615	3.064	37.847	1.00	31.12	N
ATOM	3975	CA	GLU	A	505	32.305	4.005	36.923	1.00	30.29	C
ATOM	3976	C	GLU	A	505	32.672	3.490	35.500	1.00	30.54	C
ATOM	3977	O	GLU	A	505	33.795	3.603	35.040	1.00	30.90	O
ATOM	3978	CB	GLU	A	505	33.555	4.579	37.623	1.00	29.84	C
ATOM	3979	CG	GLU	A	505	34.522	5.484	36.794	1.00	30.64	C
ATOM	3980	CD	GLU	A	505	33.845	6.636	36.067	1.00	30.76	C
ATOM	3981	OE1	GLU	A	505	32.604	6.713	36.126	1.00	33.58	O
ATOM	3982	OE2	GLU	A	505	34.546	7.445	35.405	1.00	27.70	O1-
ATOM	3983	N	THR	A	506	31.770	2.737	34.900	1.00	32.72	N
ATOM	3984	CA	THR	A	506	31.498	2.842	33.477	1.00	30.71	C
ATOM	3985	C	THR	A	506	30.144	3.518	33.584	1.00	30.02	C
ATOM	3986	O	THR	A	506	29.098	2.881	33.485	1.00	30.52	O
ATOM	3987	CB	THR	A	506	31.347	1.480	32.857	1.00	31.87	C
ATOM	3988	CG2	THR	A	506	30.724	1.603	31.495	1.00	32.08	C
ATOM	3989	OG1	THR	A	506	32.644	0.859	32.776	1.00	33.97	O
ATOM	3990	N	PHE	A	507	30.249	4.657	34.251	1.00	28.98	N
ATOM	3991	CA	PHE	A	507	29.169	5.342	34.917	1.00	26.92	C
ATOM	3992	C	PHE	A	507	29.075	6.625	34.106	1.00	25.90	C
ATOM	3993	O	PHE	A	507	28.730	6.586	32.917	1.00	22.64	O
ATOM	3994	CB	PHE	A	507	29.648	5.661	36.330	1.00	27.01	C
ATOM	3995	CG	PHE	A	507	28.600	6.192	37.248	1.00	28.40	C
ATOM	3996	CD1	PHE	A	507	27.527	6.923	36.778	1.00	26.26	C
ATOM	3997	CD2	PHE	A	507	28.789	6.093	38.622	1.00	28.34	C
ATOM	3998	CE1	PHE	A	507	26.673	7.551	37.666	1.00	28.02	C
ATOM	3999	CE2	PHE	A	507	27.934	6.718	39.511	1.00	26.64	C
ATOM	4000	CZ	PHE	A	507	26.882	7.446	39.035	1.00	26.34	C
ATOM	4001	N	THR	A	508	29.795	7.615	34.624	1.00	23.79	N
ATOM	4002	CA	THR	A	508	29.605	9.007	34.270	1.00	25.58	C
ATOM	4003	C	THR	A	508	30.579	9.372	33.153	1.00	24.27	C
ATOM	4004	O	THR	A	508	31.651	9.945	33.379	1.00	19.34	O
ATOM	4005	CB	THR	A	508	29.824	9.898	35.522	1.00	27.81	C
ATOM	4006	CG2	THR	A	508	29.006	11.184	35.427	1.00	27.64	C
ATOM	4007	OG1	THR	A	508	29.411	9.172	36.692	1.00	27.38	O
ATOM	4008	N	PHE	A	509	30.175	9.076	31.927	1.00	26.09	N
ATOM	4009	CA	PHE	A	509	31.089	9.209	30.800	1.00	29.27	C
ATOM	4010	C	PHE	A	509	31.562	10.649	30.558	1.00	29.37	C
ATOM	4011	O	PHE	A	509	32.470	10.857	29.742	1.00	29.22	O
ATOM	4012	CB	PHE	A	509	30.475	8.578	29.519	1.00	28.61	C
ATOM	4013	CG	PHE	A	509	29.409	9.410	28.848	1.00	30.39	C
ATOM	4014	CD1	PHE	A	509	29.751	10.520	28.076	1.00	31.31	C
ATOM	4015	CD2	PHE	A	509	28.107	8.935	28.764	1.00	31.82	C
ATOM	4016	CE1	PHE	A	509	28.831	11.131	27.223	1.00	29.90	C
ATOM	4017	CE2	PHE	A	509	27.170	9.543	27.906	1.00	31.41	C
ATOM	4018	CZ	PHE	A	509	27.541	10.639	27.136	1.00	31.04	C
ATOM	4019	N	HIS	A	510	31.160	11.554	31.466	1.00	28.52	N
ATOM	4020	CA	HIS	A	510	31.106	13.001	31.228	1.00	26.73	C
ATOM	4021	C	HIS	A	510	31.430	13.363	29.766	1.00	27.36	C
ATOM	4022	O	HIS	A	510	30.619	13.094	28.892	1.00	27.39	O
ATOM	4023	CB	HIS	A	510	32.021	13.738	32.212	1.00	24.61	C
ATOM	4024	CG	HIS	A	510	32.016	15.224	32.042	1.00	23.20	C
ATOM	4025	CD2	HIS	A	510	31.108	16.156	32.409	1.00	19.13	C
ATOM	4026	ND1	HIS	A	510	32.998	15.900	31.348	1.00	23.83	N
ATOM	4027	CE1	HIS	A	510	32.685	17.177	31.279	1.00	20.37	C
ATOM	4028	NE2	HIS	A	510	31.546	17.360	31.923	1.00	18.67	N
ATOM	4029	N	ALA	A	511	32.650	13.831	29.490	1.00	26.47	N
ATOM	4030	CA	ALA	A	511	33.110	14.040	28.119	1.00	26.06	C
ATOM	4031	C	ALA	A	511	32.517	15.279	27.427	1.00	28.02	C
ATOM	4032	O	ALA	A	511	32.011	15.182	26.314	1.00	30.20	O
ATOM	4033	CB	ALA	A	511	32.831	12.774	27.276	1.00	22.01	C
ATOM	4034	N	ASP	A	512	32.665	16.458	28.031	1.00	27.66	N
ATOM	4035	CA	ASP	A	512	31.940	17.650	27.558	1.00	26.35	C
ATOM	4036	C	ASP	A	512	30.605	17.315	26.859	1.00	25.46	C
ATOM	4037	O	ASP	A	512	30.404	17.662	25.687	1.00	22.46	O
ATOM	4038	CB	ASP	A	512	32.822	18.475	26.622	1.00	28.10	C
ATOM	4039	CG	ASP	A	512	32.789	19.984	26.933	1.00	30.49	C
ATOM	4040	OD1	ASP	A	512	32.547	20.373	28.103	1.00	27.50	O
ATOM	4041	OD2	ASP	A	512	33.113	20.783	26.011	1.00	31.67	O1-
ATOM	4042	N	ILE	A	513	29.781	16.505	27.545	1.00	24.03	N
ATOM	4043	CA	ILE	A	513	28.389	16.258	27.174	1.00	18.35	C
ATOM	4044	C	ILE	A	513	27.730	17.571	26.913	1.00	19.35	C

ATOM	4045	O	ILE	A	513	26.907	17.671	26.015	1.00	19.34	O
ATOM	4046	CB	ILE	A	513	27.557	15.616	28.278	1.00	16.43	C
ATOM	4047	CG1	ILE	A	513	28.316	14.488	28.959	1.00	16.18	C
ATOM	4048	CG2	ILE	A	513	26.270	15.102	27.670	1.00	18.39	C
ATOM	4049	CD1	ILE	A	513	27.473	13.550	29.809	1.00	14.73	C
ATOM	4050	N	CYS	A	514	27.917	18.494	27.857	1.00	19.00	N
ATOM	4051	CA	CYS	A	514	27.567	19.896	27.650	1.00	20.07	C
ATOM	4052	C	CYS	A	514	28.126	20.289	26.300	1.00	22.50	C
ATOM	4053	O	CYS	A	514	29.334	20.276	26.095	1.00	23.48	O
ATOM	4054	CB	CYS	A	514	28.217	20.768	28.708	1.00	17.67	C
ATOM	4055	SG	CYS	A	514	30.001	20.505	28.723	1.00	18.01	S
ATOM	4056	N	THR	A	515	27.228	20.406	25.335	1.00	25.46	N
ATOM	4057	CA	THR	A	515	27.580	20.748	23.970	1.00	26.86	C
ATOM	4058	C	THR	A	515	28.699	19.896	23.361	1.00	26.41	C
ATOM	4059	O	THR	A	515	29.493	20.391	22.563	1.00	28.04	O
ATOM	4060	CB	THR	A	515	27.885	22.263	23.827	1.00	28.89	C
ATOM	4061	CG2	THR	A	515	26.576	23.040	23.525	1.00	29.83	C
ATOM	4062	OG1	THR	A	515	28.464	22.767	25.042	1.00	32.17	O
ATOM	4063	N	LEU	A	516	28.791	18.639	23.804	1.00	22.97	N
ATOM	4064	CA	LEU	A	516	28.855	17.500	22.881	1.00	20.76	C
ATOM	4065	C	LEU	A	516	27.510	17.536	22.152	1.00	20.35	C
ATOM	4066	O	LEU	A	516	27.427	17.980	21.001	1.00	19.65	O
ATOM	4067	CB	LEU	A	516	28.905	16.167	23.656	1.00	18.70	C
ATOM	4068	CG	LEU	A	516	30.129	15.387	24.146	1.00	11.26	C
ATOM	4069	CD1	LEU	A	516	29.858	13.895	24.061	1.00	11.26	C
ATOM	4070	CD2	LEU	A	516	31.309	15.729	23.330	1.00	14.12	C
ATOM	4071	N	SER	A	517	26.489	17.504	23.015	1.00	21.27	N
ATOM	4072	CA	SER	A	517	25.113	17.099	22.728	1.00	18.57	C
ATOM	4073	C	SER	A	517	24.157	18.259	22.953	1.00	17.16	C
ATOM	4074	O	SER	A	517	24.307	18.999	23.915	1.00	14.00	O
ATOM	4075	CB	SER	A	517	24.713	15.963	23.680	1.00	20.93	C
ATOM	4076	OG	SER	A	517	24.982	16.296	25.045	1.00	16.97	O
ATOM	4077	N	GLU	A	518	23.085	18.293	22.169	1.00	18.23	N
ATOM	4078	CA	GLU	A	518	22.162	19.418	22.155	1.00	19.60	C
ATOM	4079	C	GLU	A	518	20.713	18.940	22.104	1.00	19.98	C
ATOM	4080	O	GLU	A	518	20.437	17.817	21.692	1.00	18.87	O
ATOM	4081	CB	GLU	A	518	22.443	20.318	20.947	1.00	22.90	C
ATOM	4082	CG	GLU	A	518	23.891	20.813	20.811	1.00	25.02	C
ATOM	4083	CD	GLU	A	518	23.986	22.237	20.281	1.00	22.60	C
ATOM	4084	OE1	GLU	A	518	23.615	22.475	19.110	1.00	20.70	O
ATOM	4085	OE2	GLU	A	518	24.388	23.126	21.061	1.00	23.36	O1-
ATOM	4086	N	LYS	A	519	19.797	19.884	22.314	1.00	23.54	N
ATOM	4087	CA	LYS	A	519	18.371	19.614	22.551	1.00	24.75	C
ATOM	4088	C	LYS	A	519	18.200	18.755	23.804	1.00	27.97	C
ATOM	4089	O	LYS	A	519	18.733	17.638	23.900	1.00	28.69	O
ATOM	4090	CB	LYS	A	519	17.732	18.927	21.346	1.00	21.56	C
ATOM	4091	CG	LYS	A	519	16.276	18.526	21.524	1.00	16.97	C
ATOM	4092	CD	LYS	A	519	15.692	18.116	20.174	1.00	17.59	C
ATOM	4093	CE	LYS	A	519	14.341	17.430	20.287	1.00	18.48	C
ATOM	4094	NZ	LYS	A	519	13.728	17.036	18.962	1.00	18.54	N1+
ATOM	4095	N	GLU	A	520	17.552	19.324	24.817	1.00	28.25	N
ATOM	4096	CA	GLU	A	520	17.420	18.641	26.099	1.00	27.40	C
ATOM	4097	C	GLU	A	520	16.947	17.204	25.945	1.00	29.51	C
ATOM	4098	O	GLU	A	520	17.010	16.423	26.886	1.00	31.44	O
ATOM	4099	CB	GLU	A	520	16.459	19.417	26.980	1.00	22.39	C
ATOM	4100	CG	GLU	A	520	16.902	20.824	27.137	1.00	17.69	C
ATOM	4101	CD	GLU	A	520	18.391	20.924	27.333	1.00	16.28	C
ATOM	4102	OE1	GLU	A	520	18.877	20.613	28.429	1.00	17.87	O
ATOM	4103	OE2	GLU	A	520	19.084	21.272	26.372	1.00	17.14	O1-
ATOM	4104	N	ARG	A	521	16.406	16.883	24.775	1.00	32.04	N
ATOM	4105	CA	ARG	A	521	16.024	15.522	24.475	1.00	33.58	C
ATOM	4106	C	ARG	A	521	17.287	14.687	24.495	1.00	33.32	C
ATOM	4107	O	ARG	A	521	17.341	13.664	25.185	1.00	35.16	O
ATOM	4108	CB	ARG	A	521	15.298	15.456	23.131	1.00	34.23	C
ATOM	4109	CG	ARG	A	521	13.950	16.232	23.131	1.00	35.49	C
ATOM	4110	CD	ARG	A	521	12.801	15.429	23.747	1.00	38.31	C
ATOM	4111	NE	ARG	A	521	12.787	14.036	23.296	1.00	39.41	N
ATOM	4112	CZ	ARG	A	521	12.362	13.650	22.094	1.00	40.68	C
ATOM	4113	NH1	ARG	A	521	11.733	14.513	21.308	1.00	43.68	N1+
ATOM	4114	NH2	ARG	A	521	12.479	12.384	21.712	1.00	40.15	N
ATOM	4115	N	GLN	A	522	18.369	15.302	24.032	1.00	30.52	N

ATOM	4116	CA	GLN	A	522	19.687	14.689	24.103	1.00	25.95	C
ATOM	4117	C	GLN	A	522	20.450	15.095	25.345	1.00	20.74	C
ATOM	4118	O	GLN	A	522	21.400	14.411	25.727	1.00	15.80	O
ATOM	4119	CB	GLN	A	522	20.515	15.047	22.867	1.00	26.11	C
ATOM	4120	CG	GLN	A	522	19.902	14.640	21.555	1.00	26.14	C
ATOM	4121	CD	GLN	A	522	20.623	15.273	20.397	1.00	28.67	C
ATOM	4122	NE2	GLN	A	522	19.963	15.346	19.241	1.00	26.87	N
ATOM	4123	OE1	GLN	A	522	21.777	15.681	20.533	1.00	27.66	O
ATOM	4124	N	ILE	A	523	20.145	16.264	25.897	1.00	18.75	N
ATOM	4125	CA	ILE	A	523	20.906	16.687	27.069	1.00	19.51	C
ATOM	4126	C	ILE	A	523	20.389	15.978	28.312	1.00	19.06	C
ATOM	4127	O	ILE	A	523	21.156	15.338	29.050	1.00	19.63	O
ATOM	4128	CB	ILE	A	523	20.862	18.206	27.321	1.00	17.88	C
ATOM	4129	CG1	ILE	A	523	20.994	18.975	26.004	1.00	21.59	C
ATOM	4130	CG2	ILE	A	523	21.993	18.578	28.263	1.00	18.05	C
ATOM	4131	CD1	ILE	A	523	21.840	20.265	26.080	1.00	21.79	C
ATOM	4132	N	LYS	A	524	19.076	16.059	28.512	1.00	16.03	N
ATOM	4133	CA	LYS	A	524	18.464	15.493	29.680	1.00	12.94	C
ATOM	4134	C	LYS	A	524	18.691	13.989	29.649	1.00	13.61	C
ATOM	4135	O	LYS	A	524	19.531	13.510	30.385	1.00	13.89	O
ATOM	4136	CB	LYS	A	524	16.986	15.858	29.752	1.00	10.56	C
ATOM	4137	CG	LYS	A	524	16.375	15.511	31.100	1.00	15.61	C
ATOM	4138	CD	LYS	A	524	15.266	16.457	31.565	1.00	13.48	C
ATOM	4139	CE	LYS	A	524	14.946	16.213	33.033	1.00	11.44	C
ATOM	4140	NZ	LYS	A	524	16.147	16.413	33.888	1.00	5.17	N1+
ATOM	4141	N	LYS	A	525	18.184	13.312	28.625	1.00	14.90	N
ATOM	4142	CA	LYS	A	525	18.299	11.851	28.506	1.00	16.22	C
ATOM	4143	C	LYS	A	525	19.550	11.230	29.180	1.00	17.48	C
ATOM	4144	O	LYS	A	525	19.457	10.186	29.837	1.00	16.17	O
ATOM	4145	CB	LYS	A	525	18.212	11.450	27.014	1.00	13.21	C
ATOM	4146	CG	LYS	A	525	18.854	10.133	26.631	1.00	10.66	C
ATOM	4147	CD	LYS	A	525	20.084	10.378	25.775	1.00	15.61	C
ATOM	4148	CE	LYS	A	525	20.840	9.078	25.401	1.00	17.64	C
ATOM	4149	NZ	LYS	A	525	21.001	8.890	23.909	1.00	14.96	N1+
ATOM	4150	N	GLN	A	526	20.707	11.881	29.040	1.00	18.82	N
ATOM	4151	CA	GLN	A	526	21.912	11.429	29.719	1.00	18.67	C
ATOM	4152	C	GLN	A	526	21.750	11.834	31.156	1.00	20.95	C
ATOM	4153	O	GLN	A	526	21.540	10.964	32.010	1.00	21.14	O
ATOM	4154	CB	GLN	A	526	23.178	12.073	29.151	1.00	18.08	C
ATOM	4155	CG	GLN	A	526	23.862	11.294	28.030	1.00	17.91	C
ATOM	4156	CD	GLN	A	526	23.946	9.804	28.298	1.00	20.28	C
ATOM	4157	NE2	GLN	A	526	23.552	9.007	27.320	1.00	22.11	N
ATOM	4158	OE1	GLN	A	526	24.427	9.376	29.339	1.00	22.06	O
ATOM	4159	N	THR	A	527	21.660	13.145	31.398	1.00	21.86	N
ATOM	4160	CA	THR	A	527	21.391	13.654	32.749	1.00	24.95	C
ATOM	4161	C	THR	A	527	20.378	12.766	33.490	1.00	25.85	C
ATOM	4162	O	THR	A	527	20.595	12.424	34.646	1.00	27.72	O
ATOM	4163	CB	THR	A	527	20.843	15.103	32.733	1.00	25.26	C
ATOM	4164	CG2	THR	A	527	21.009	15.752	34.105	1.00	23.79	C
ATOM	4165	OG1	THR	A	527	21.544	15.880	31.752	1.00	24.22	O
ATOM	4166	N	ALA	A	528	19.375	12.254	32.771	1.00	27.33	N
ATOM	4167	CA	ALA	A	528	18.426	11.281	33.333	1.00	26.81	C
ATOM	4168	C	ALA	A	528	18.996	9.857	33.369	1.00	25.61	C
ATOM	4169	O	ALA	A	528	18.965	9.204	34.412	1.00	25.23	O
ATOM	4170	CB	ALA	A	528	17.100	11.306	32.562	1.00	25.49	C
ATOM	4171	N	LEU	A	529	19.654	9.438	32.296	1.00	24.25	N
ATOM	4172	CA	LEU	A	529	20.315	8.139	32.279	1.00	25.05	C
ATOM	4173	C	LEU	A	529	21.267	7.996	33.493	1.00	25.41	C
ATOM	4174	O	LEU	A	529	21.762	6.891	33.797	1.00	25.16	O
ATOM	4175	CB	LEU	A	529	21.086	7.959	30.955	1.00	25.66	C
ATOM	4176	CG	LEU	A	529	20.727	6.802	30.000	1.00	24.04	C
ATOM	4177	CD1	LEU	A	529	20.160	7.352	28.710	1.00	19.96	C
ATOM	4178	CD2	LEU	A	529	21.952	5.961	29.702	1.00	21.68	C
ATOM	4179	N	VAL	A	530	21.523	9.116	34.175	1.00	24.26	N
ATOM	4180	CA	VAL	A	530	22.246	9.102	35.440	1.00	22.74	C
ATOM	4181	C	VAL	A	530	21.369	8.479	36.518	1.00	23.56	C
ATOM	4182	O	VAL	A	530	21.867	7.708	37.360	1.00	22.76	O
ATOM	4183	CB	VAL	A	530	22.618	10.525	35.896	1.00	23.03	C
ATOM	4184	CG1	VAL	A	530	23.610	10.471	37.036	1.00	24.30	C
ATOM	4185	CG2	VAL	A	530	23.200	11.305	34.754	1.00	22.73	C
ATOM	4186	N	GLU	A	531	20.076	8.831	36.502	1.00	22.46	N

ATOM	4187	CA	GLU	A	531	19.139	8.472	37.575	1.00	23.18	C
ATOM	4188	C	GLU	A	531	19.096	7.000	37.982	1.00	24.30	C
ATOM	4189	O	GLU	A	531	19.552	6.668	39.074	1.00	28.02	O
ATOM	4190	CB	GLU	A	531	17.728	8.959	37.262	1.00	22.28	C
ATOM	4191	CG	GLU	A	531	16.791	8.825	38.456	1.00	21.12	C
ATOM	4192	CD	GLU	A	531	16.177	10.137	38.917	1.00	19.64	C
ATOM	4193	OE1	GLU	A	531	16.850	10.917	39.623	1.00	18.65	O
ATOM	4194	OE2	GLU	A	531	14.977	10.337	38.671	1.00	18.88	O1-
ATOM	4195	N	LEU	A	532	18.603	6.115	37.114	1.00	23.63	N
ATOM	4196	CA	LEU	A	532	18.693	4.662	37.362	1.00	24.00	C
ATOM	4197	C	LEU	A	532	19.972	4.240	38.078	1.00	24.04	C
ATOM	4198	O	LEU	A	532	19.907	3.770	39.211	1.00	26.15	O
ATOM	4199	CB	LEU	A	532	18.604	3.854	36.071	1.00	22.16	C
ATOM	4200	CG	LEU	A	532	17.991	4.619	34.926	1.00	23.10	C
ATOM	4201	CD1	LEU	A	532	19.075	5.386	34.246	1.00	28.26	C
ATOM	4202	CD2	LEU	A	532	17.348	3.681	33.973	1.00	27.82	C
ATOM	4203	N	VAL	A	533	21.131	4.440	37.442	1.00	22.79	N
ATOM	4204	CA	VAL	A	533	22.397	3.925	37.974	1.00	19.76	C
ATOM	4205	C	VAL	A	533	22.905	4.700	39.179	1.00	18.89	C
ATOM	4206	O	VAL	A	533	23.874	4.302	39.806	1.00	19.08	O
ATOM	4207	CB	VAL	A	533	23.521	3.852	36.889	1.00	18.59	C
ATOM	4208	CG1	VAL	A	533	23.308	2.624	35.996	1.00	15.07	C
ATOM	4209	CG2	VAL	A	533	23.560	5.142	36.045	1.00	20.41	C
ATOM	4210	N	LYS	A	534	22.243	5.792	39.530	1.00	19.45	N
ATOM	4211	CA	LYS	A	534	22.478	6.365	40.845	1.00	21.27	C
ATOM	4212	C	LYS	A	534	21.526	5.757	41.868	1.00	21.02	C
ATOM	4213	O	LYS	A	534	21.531	6.167	43.023	1.00	20.41	O
ATOM	4214	CB	LYS	A	534	22.357	7.898	40.818	1.00	22.77	C
ATOM	4215	CG	LYS	A	534	20.941	8.444	40.696	1.00	23.98	C
ATOM	4216	CD	LYS	A	534	20.290	8.641	42.054	1.00	28.34	C
ATOM	4217	CE	LYS	A	534	18.928	7.988	42.095	1.00	26.73	C
ATOM	4218	NZ	LYS	A	534	18.037	8.601	41.075	1.00	25.87	N1+
ATOM	4219	N	HIS	A	535	20.627	4.879	41.418	1.00	21.35	N
ATOM	4220	CA	HIS	A	535	19.932	3.950	42.323	1.00	20.99	C
ATOM	4221	C	HIS	A	535	19.602	2.550	41.769	1.00	22.37	C
ATOM	4222	O	HIS	A	535	18.524	2.290	41.214	1.00	22.53	O
ATOM	4223	CB	HIS	A	535	18.722	4.628	42.999	1.00	20.28	C
ATOM	4224	CG	HIS	A	535	17.424	4.489	42.272	1.00	16.66	C
ATOM	4225	CD2	HIS	A	535	17.111	4.603	40.961	1.00	19.33	C
ATOM	4226	ND1	HIS	A	535	16.227	4.401	42.941	1.00	14.54	N
ATOM	4227	CE1	HIS	A	535	15.235	4.488	42.081	1.00	19.05	C
ATOM	4228	NE2	HIS	A	535	15.743	4.611	40.868	1.00	19.23	N
ATOM	4229	N	LYS	A	536	20.476	1.632	42.174	1.00	22.18	N
ATOM	4230	CA	LYS	A	536	20.778	0.332	41.553	1.00	23.44	C
ATOM	4231	C	LYS	A	536	22.184	0.035	42.107	1.00	26.46	C
ATOM	4232	O	LYS	A	536	22.757	-1.031	41.833	1.00	24.60	O
ATOM	4233	CB	LYS	A	536	20.884	0.419	40.023	1.00	18.83	C
ATOM	4234	CG	LYS	A	536	19.572	0.375	39.276	1.00	14.87	C
ATOM	4235	CD	LYS	A	536	19.778	0.539	37.773	1.00	12.15	C
ATOM	4236	CE	LYS	A	536	20.178	-0.774	37.107	1.00	12.18	C
ATOM	4237	NZ	LYS	A	536	19.620	-0.875	35.727	1.00	11.32	N1+
ATOM	4238	N	PRO	A	537	22.840	1.084	42.670	1.00	28.07	N
ATOM	4239	CA	PRO	A	537	23.264	1.257	44.063	1.00	27.56	C
ATOM	4240	C	PRO	A	537	22.139	1.885	44.911	1.00	26.87	C
ATOM	4241	O	PRO	A	537	21.305	2.611	44.393	1.00	26.05	O
ATOM	4242	CB	PRO	A	537	24.475	2.181	43.918	1.00	26.82	C
ATOM	4243	CG	PRO	A	537	24.086	3.095	42.877	1.00	29.18	C
ATOM	4244	CD	PRO	A	537	23.285	2.244	41.868	1.00	30.49	C
ATOM	4245	N	LYS	A	538	22.119	1.587	46.205	1.00	28.13	N
ATOM	4246	CA	LYS	A	538	21.009	1.933	47.109	1.00	27.98	C
ATOM	4247	C	LYS	A	538	19.630	2.015	46.460	1.00	26.40	C
ATOM	4248	O	LYS	A	538	19.218	3.072	45.974	1.00	24.43	O
ATOM	4249	CB	LYS	A	538	21.297	3.229	47.883	1.00	29.62	C
ATOM	4250	CG	LYS	A	538	21.027	3.139	49.423	1.00	25.31	C
ATOM	4251	CD	LYS	A	538	22.012	2.197	50.131	1.00	24.14	C
ATOM	4252	CE	LYS	A	538	21.945	2.359	51.647	1.00	23.68	C
ATOM	4253	NZ	LYS	A	538	23.277	2.474	52.317	1.00	18.75	N1+
ATOM	4254	N	ALA	A	539	18.869	0.938	46.625	1.00	24.41	N
ATOM	4255	CA	ALA	A	539	17.672	0.728	45.840	1.00	24.62	C
ATOM	4256	C	ALA	A	539	16.793	1.958	45.958	1.00	23.58	C
ATOM	4257	O	ALA	A	539	16.534	2.635	44.963	1.00	22.67	O

ATOM	4258	CB	ALA	A	539	16.943	-0.511	46.325	1.00	25.28	C
ATOM	4259	N	THR	A	540	16.559	2.380	47.195	1.00	23.77	N
ATOM	4260	CA	THR	A	540	15.772	3.585	47.440	1.00	23.68	C
ATOM	4261	C	THR	A	540	16.133	4.351	48.713	1.00	25.34	C
ATOM	4262	O	THR	A	540	16.602	3.772	49.709	1.00	23.64	O
ATOM	4263	CB	THR	A	540	14.275	3.272	47.461	1.00	21.40	C
ATOM	4264	CG2	THR	A	540	13.857	2.656	48.804	1.00	20.40	C
ATOM	4265	OG1	THR	A	540	13.546	4.479	47.220	1.00	20.73	O
ATOM	4266	N	LYS	A	541	15.942	5.666	48.654	1.00	26.45	N
ATOM	4267	CA	LYS	A	541	16.156	6.528	49.810	1.00	28.39	C
ATOM	4268	C	LYS	A	541	15.191	7.698	49.794	1.00	27.80	C
ATOM	4269	O	LYS	A	541	14.459	7.884	48.830	1.00	29.39	O
ATOM	4270	CB	LYS	A	541	17.608	7.027	49.847	1.00	29.26	C
ATOM	4271	CG	LYS	A	541	18.614	5.982	50.350	1.00	25.06	C
ATOM	4272	CD	LYS	A	541	18.582	5.886	51.869	1.00	20.48	C
ATOM	4273	CE	LYS	A	541	19.335	7.030	52.505	1.00	17.85	C
ATOM	4274	NZ	LYS	A	541	20.734	7.139	52.022	1.00	16.81	N1+
ATOM	4275	N	GLU	A	542	15.016	8.318	50.952	1.00	29.97	N
ATOM	4276	CA	GLU	A	542	14.101	9.453	51.086	1.00	31.00	C
ATOM	4277	C	GLU	A	542	14.840	10.660	50.478	1.00	30.24	C
ATOM	4278	O	GLU	A	542	15.814	10.456	49.756	1.00	29.44	O
ATOM	4279	CB	GLU	A	542	13.755	9.669	52.582	1.00	29.69	C
ATOM	4280	CG	GLU	A	542	12.602	10.630	52.878	1.00	26.76	C
ATOM	4281	CD	GLU	A	542	11.289	10.221	52.240	1.00	26.79	C
ATOM	4282	OE1	GLU	A	542	11.093	9.010	51.995	1.00	25.61	O
ATOM	4283	OE2	GLU	A	542	10.425	11.112	52.035	1.00	25.89	O1-
ATOM	4284	N	GLN	A	543	14.538	11.862	50.981	1.00	30.95	N
ATOM	4285	CA	GLN	A	543	15.020	13.157	50.451	1.00	29.95	C
ATOM	4286	C	GLN	A	543	16.307	13.073	49.606	1.00	29.03	C
ATOM	4287	O	GLN	A	543	16.294	13.347	48.389	1.00	25.49	O
ATOM	4288	CB	GLN	A	543	15.208	14.161	51.624	1.00	26.87	C
ATOM	4289	CG	GLN	A	543	16.249	13.747	52.684	1.00	21.98	C
ATOM	4290	CD	GLN	A	543	15.650	13.140	53.962	1.00	21.18	C
ATOM	4291	NE2	GLN	A	543	16.336	13.335	55.077	1.00	20.31	N
ATOM	4292	OE1	GLN	A	543	14.613	12.479	53.939	1.00	20.60	O
ATOM	4293	N	LEU	A	544	17.307	12.444	50.225	1.00	26.45	N
ATOM	4294	CA	LEU	A	544	18.653	12.279	49.694	1.00	24.19	C
ATOM	4295	C	LEU	A	544	18.793	12.637	48.228	1.00	22.92	C
ATOM	4296	O	LEU	A	544	19.185	13.758	47.923	1.00	23.86	O
ATOM	4297	CB	LEU	A	544	19.140	10.841	49.914	1.00	21.09	C
ATOM	4298	CG	LEU	A	544	19.186	10.233	51.311	1.00	16.44	C
ATOM	4299	CD1	LEU	A	544	19.940	11.158	52.243	1.00	16.15	C
ATOM	4300	CD2	LEU	A	544	17.789	9.967	51.819	1.00	16.66	C
ATOM	4301	N	LYS	A	545	18.194	11.817	47.362	1.00	20.06	N
ATOM	4302	CA	LYS	A	545	18.749	11.587	46.040	1.00	20.52	C
ATOM	4303	C	LYS	A	545	18.614	12.701	45.002	1.00	22.77	C
ATOM	4304	O	LYS	A	545	18.889	12.471	43.832	1.00	25.57	O
ATOM	4305	CB	LYS	A	545	18.248	10.254	45.461	1.00	18.18	C
ATOM	4306	CG	LYS	A	545	16.821	10.244	44.916	1.00	17.26	C
ATOM	4307	CD	LYS	A	545	15.906	9.289	45.696	1.00	12.74	C
ATOM	4308	CE	LYS	A	545	16.474	7.882	45.800	1.00	8.79	C
ATOM	4309	NZ	LYS	A	545	17.238	7.691	47.056	1.00	6.18	N1+
ATOM	4310	N	ALA	A	546	18.410	13.938	45.439	1.00	23.50	N
ATOM	4311	CA	ALA	A	546	18.556	15.071	44.535	1.00	22.32	C
ATOM	4312	C	ALA	A	546	19.741	15.954	44.903	1.00	22.35	C
ATOM	4313	O	ALA	A	546	20.086	16.854	44.156	1.00	23.42	O
ATOM	4314	CB	ALA	A	546	17.277	15.899	44.490	1.00	23.51	C
ATOM	4315	N	VAL	A	547	20.379	15.694	46.036	1.00	22.24	N
ATOM	4316	CA	VAL	A	547	21.717	16.229	46.279	1.00	23.87	C
ATOM	4317	C	VAL	A	547	22.677	15.472	45.360	1.00	23.89	C
ATOM	4318	O	VAL	A	547	23.877	15.782	45.287	1.00	23.60	O
ATOM	4319	CB	VAL	A	547	22.170	16.040	47.768	1.00	25.64	C
ATOM	4320	CG1	VAL	A	547	22.400	14.566	48.059	1.00	25.82	C
ATOM	4321	CG2	VAL	A	547	23.449	16.861	48.073	1.00	24.16	C
ATOM	4322	N	MET	A	548	22.132	14.475	44.661	1.00	22.84	N
ATOM	4323	CA	MET	A	548	22.841	13.763	43.593	1.00	20.52	C
ATOM	4324	C	MET	A	548	22.779	14.480	42.239	1.00	17.26	C
ATOM	4325	O	MET	A	548	23.748	15.082	41.805	1.00	17.45	O
ATOM	4326	CB	MET	A	548	22.268	12.353	43.445	1.00	21.64	C
ATOM	4327	CG	MET	A	548	22.122	11.605	44.756	1.00	18.22	C
ATOM	4328	SD	MET	A	548	23.630	10.850	45.228	1.00	14.88	S

ATOM	4329	CE	MET	A	548	24.207	12.056	46.438	1.00	16.13	C
ATOM	4330	N	ASP	A	549	21.618	14.485	41.609	1.00	13.78	N
ATOM	4331	CA	ASP	A	549	21.502	15.018	40.264	1.00	16.01	C
ATOM	4332	C	ASP	A	549	21.636	16.528	40.156	1.00	18.51	C
ATOM	4333	O	ASP	A	549	21.000	17.147	39.300	1.00	20.40	O
ATOM	4334	CB	ASP	A	549	20.174	14.604	39.649	1.00	14.29	C
ATOM	4335	CG	ASP	A	549	20.323	13.496	38.677	1.00	14.70	C
ATOM	4336	OD1	ASP	A	549	21.204	12.641	38.891	1.00	11.87	O
ATOM	4337	OD2	ASP	A	549	19.566	13.495	37.687	1.00	17.11	O1-
ATOM	4338	N	ASP	A	550	22.330	17.136	41.102	1.00	19.81	N
ATOM	4339	CA	ASP	A	550	22.847	18.486	40.917	1.00	25.24	C
ATOM	4340	C	ASP	A	550	24.372	18.383	41.093	1.00	27.84	C
ATOM	4341	O	ASP	A	550	25.143	18.785	40.213	1.00	29.39	O
ATOM	4342	CB	ASP	A	550	22.214	19.460	41.935	1.00	24.68	C
ATOM	4343	CG	ASP	A	550	20.805	19.913	41.527	1.00	25.32	C
ATOM	4344	OD1	ASP	A	550	20.168	19.239	40.694	1.00	26.62	O
ATOM	4345	OD2	ASP	A	550	20.334	20.971	42.003	1.00	23.45	O1-
ATOM	4346	N	PHE	A	551	24.778	17.554	42.046	1.00	29.10	N
ATOM	4347	CA	PHE	A	551	26.143	17.056	42.061	1.00	29.37	C
ATOM	4348	C	PHE	A	551	26.481	16.269	40.798	1.00	28.36	C
ATOM	4349	O	PHE	A	551	27.633	15.963	40.538	1.00	29.93	O
ATOM	4350	CB	PHE	A	551	26.361	16.227	43.324	1.00	30.56	C
ATOM	4351	CG	PHE	A	551	26.670	17.064	44.509	1.00	31.41	C
ATOM	4352	CD1	PHE	A	551	26.260	18.398	44.526	1.00	31.60	C
ATOM	4353	CD2	PHE	A	551	27.588	16.637	45.447	1.00	32.87	C
ATOM	4354	CE1	PHE	A	551	26.774	19.299	45.427	1.00	31.67	C
ATOM	4355	CE2	PHE	A	551	28.120	17.542	46.375	1.00	34.18	C
ATOM	4356	CZ	PHE	A	551	27.712	18.878	46.357	1.00	33.28	C
ATOM	4357	N	ALA	A	552	25.470	16.021	39.976	1.00	27.01	N
ATOM	4358	CA	ALA	A	552	25.676	15.608	38.605	1.00	25.37	C
ATOM	4359	C	ALA	A	552	24.735	16.431	37.719	1.00	25.73	C
ATOM	4360	O	ALA	A	552	23.980	15.910	36.886	1.00	24.39	O
ATOM	4361	CB	ALA	A	552	25.417	14.134	38.461	1.00	26.18	C
ATOM	4362	N	ALA	A	553	24.769	17.732	37.975	1.00	24.63	N
ATOM	4363	CA	ALA	A	553	24.274	18.746	37.068	1.00	22.98	C
ATOM	4364	C	ALA	A	553	25.328	19.824	37.002	1.00	25.17	C
ATOM	4365	O	ALA	A	553	25.138	20.792	36.306	1.00	26.82	O
ATOM	4366	CB	ALA	A	553	23.003	19.333	37.572	1.00	23.98	C
ATOM	4367	N	PHE	A	554	26.340	19.752	37.866	1.00	27.85	N
ATOM	4368	CA	PHE	A	554	27.586	20.505	37.668	1.00	28.64	C
ATOM	4369	C	PHE	A	554	28.412	19.808	36.596	1.00	25.54	C
ATOM	4370	O	PHE	A	554	29.324	20.398	36.026	1.00	24.77	O
ATOM	4371	CB	PHE	A	554	28.405	20.583	38.968	1.00	32.92	C
ATOM	4372	CG	PHE	A	554	28.806	21.997	39.366	1.00	37.67	C
ATOM	4373	CD1	PHE	A	554	28.374	23.110	38.618	1.00	39.00	C
ATOM	4374	CD2	PHE	A	554	29.534	22.220	40.544	1.00	37.65	C
ATOM	4375	CE1	PHE	A	554	28.648	24.436	39.051	1.00	39.21	C
ATOM	4376	CE2	PHE	A	554	29.818	23.532	40.984	1.00	40.34	C
ATOM	4377	CZ	PHE	A	554	29.369	24.647	40.233	1.00	39.54	C
ATOM	4378	N	VAL	A	555	28.081	18.543	36.352	1.00	23.93	N
ATOM	4379	CA	VAL	A	555	28.467	17.800	35.147	1.00	22.21	C
ATOM	4380	C	VAL	A	555	28.557	18.670	33.893	1.00	20.12	C
ATOM	4381	O	VAL	A	555	29.305	18.360	32.975	1.00	18.10	O
ATOM	4382	CB	VAL	A	555	27.484	16.602	34.897	1.00	21.30	C
ATOM	4383	CG1	VAL	A	555	26.074	17.094	34.820	1.00	22.10	C
ATOM	4384	CG2	VAL	A	555	27.815	15.870	33.632	1.00	22.52	C
ATOM	4385	N	GLU	A	556	27.829	19.772	33.855	1.00	20.36	N
ATOM	4386	CA	GLU	A	556	28.107	20.753	32.822	1.00	22.51	C
ATOM	4387	C	GLU	A	556	29.129	21.755	33.324	1.00	22.13	C
ATOM	4388	O	GLU	A	556	30.316	21.503	33.183	1.00	21.46	O
ATOM	4389	CB	GLU	A	556	26.827	21.440	32.333	1.00	24.42	C
ATOM	4390	CG	GLU	A	556	26.014	20.591	31.348	1.00	25.09	C
ATOM	4391	CD	GLU	A	556	25.397	19.340	32.002	1.00	29.89	C
ATOM	4392	OE1	GLU	A	556	26.157	18.391	32.313	1.00	28.92	O
ATOM	4393	OE2	GLU	A	556	24.150	19.300	32.192	1.00	30.78	O1-
ATOM	4394	N	LYS	A	557	28.693	22.721	34.130	1.00	23.25	N
ATOM	4395	CA	LYS	A	557	29.514	23.885	34.484	1.00	26.16	C
ATOM	4396	C	LYS	A	557	30.893	23.667	35.189	1.00	28.55	C
ATOM	4397	O	LYS	A	557	31.455	24.625	35.736	1.00	32.54	O
ATOM	4398	CB	LYS	A	557	28.688	24.876	35.319	1.00	25.61	C
ATOM	4399	CG	LYS	A	557	27.221	24.986	34.979	1.00	25.26	C

ATOM	4400	CD	LYS	A	557	26.383	25.468	36.212	1.00	26.93	C
ATOM	4401	CE	LYS	A	557	24.868	25.275	35.938	1.00	29.30	C
ATOM	4402	NZ	LYS	A	557	23.869	26.075	36.726	1.00	26.93	N1+
ATOM	4403	N	CYS	A	558	31.439	22.448	35.204	1.00	28.73	N
ATOM	4404	CA	CYS	A	558	32.899	22.266	35.342	1.00	26.69	C
ATOM	4405	C	CYS	A	558	33.460	21.735	34.016	1.00	26.16	C
ATOM	4406	O	CYS	A	558	34.575	21.193	33.962	1.00	25.82	O
ATOM	4407	CB	CYS	A	558	33.247	21.290	36.484	1.00	27.88	C
ATOM	4408	SG	CYS	A	558	34.126	19.745	35.984	1.00	25.90	S
ATOM	4409	N	CYS	A	559	32.702	21.924	32.939	1.00	24.28	N
ATOM	4410	CA	CYS	A	559	33.067	21.378	31.638	1.00	24.57	C
ATOM	4411	C	CYS	A	559	33.527	22.453	30.635	1.00	25.31	C
ATOM	4412	O	CYS	A	559	32.955	22.594	29.534	1.00	22.80	O
ATOM	4413	CB	CYS	A	559	31.882	20.610	31.057	1.00	24.33	C
ATOM	4414	SG	CYS	A	559	30.664	21.671	30.225	1.00	18.67	S
ATOM	4415	N	LYS	A	560	34.588	23.170	30.993	1.00	24.30	N
ATOM	4416	CA	LYS	A	560	35.196	24.124	30.082	1.00	24.61	C
ATOM	4417	C	LYS	A	560	36.487	24.703	30.634	1.00	24.70	C
ATOM	4418	O	LYS	A	560	36.873	24.417	31.765	1.00	22.58	O
ATOM	4419	CB	LYS	A	560	34.215	25.242	29.754	1.00	25.54	C
ATOM	4420	CG	LYS	A	560	33.656	25.152	28.339	1.00	26.31	C
ATOM	4421	CD	LYS	A	560	32.511	26.109	28.108	1.00	24.00	C
ATOM	4422	CE	LYS	A	560	31.495	25.480	27.188	1.00	25.24	C
ATOM	4423	NZ	LYS	A	560	31.446	24.014	27.391	1.00	26.72	N1+
ATOM	4424	N	ALA	A	561	37.126	25.555	29.841	1.00	24.25	N
ATOM	4425	CA	ALA	A	561	38.507	25.915	30.078	1.00	24.71	C
ATOM	4426	C	ALA	A	561	39.300	24.620	30.175	1.00	26.65	C
ATOM	4427	O	ALA	A	561	39.333	23.999	31.218	1.00	27.41	O
ATOM	4428	CB	ALA	A	561	38.622	26.707	31.359	1.00	25.16	C
ATOM	4429	N	ASP	A	562	39.642	24.065	29.016	1.00	30.60	N
ATOM	4430	CA	ASP	A	562	40.525	22.892	28.929	1.00	30.34	C
ATOM	4431	C	ASP	A	562	39.961	21.653	29.616	1.00	31.09	C
ATOM	4432	O	ASP	A	562	40.593	21.132	30.562	1.00	31.08	O
ATOM	4433	CB	ASP	A	562	41.905	23.198	29.516	1.00	28.16	C
ATOM	4434	CG	ASP	A	562	42.952	22.216	29.054	1.00	25.04	C
ATOM	4435	OD1	ASP	A	562	42.717	21.514	28.053	1.00	24.20	O
ATOM	4436	OD2	ASP	A	562	44.000	22.117	29.707	1.00	28.51	O1-
ATOM	4437	N	ASP	A	563	38.979	21.040	28.935	1.00	30.71	N
ATOM	4438	CA	ASP	A	563	38.059	20.068	29.538	1.00	28.76	C
ATOM	4439	C	ASP	A	563	38.485	18.610	29.373	1.00	28.00	C
ATOM	4440	O	ASP	A	563	39.612	18.256	29.693	1.00	28.65	O
ATOM	4441	CB	ASP	A	563	36.615	20.261	29.028	1.00	30.30	C
ATOM	4442	CG	ASP	A	563	36.508	21.125	27.746	1.00	33.01	C
ATOM	4443	OD1	ASP	A	563	37.154	22.206	27.640	1.00	32.70	O
ATOM	4444	OD2	ASP	A	563	35.634	20.803	26.908	1.00	31.15	O1-
ATOM	4445	N	LYS	A	564	37.563	17.749	28.966	1.00	29.53	N
ATOM	4446	CA	LYS	A	564	37.756	16.283	28.945	1.00	31.53	C
ATOM	4447	C	LYS	A	564	38.549	15.598	30.061	1.00	32.06	C
ATOM	4448	O	LYS	A	564	38.498	14.370	30.188	1.00	32.29	O
ATOM	4449	CB	LYS	A	564	38.296	15.821	27.591	1.00	30.45	C
ATOM	4450	CG	LYS	A	564	37.233	15.744	26.497	1.00	31.07	C
ATOM	4451	CD	LYS	A	564	36.111	14.775	26.849	1.00	30.53	C
ATOM	4452	CE	LYS	A	564	35.347	14.318	25.598	1.00	32.26	C
ATOM	4453	NZ	LYS	A	564	35.355	12.798	25.474	1.00	34.40	N1+
ATOM	4454	N	GLU	A	565	39.050	16.383	31.006	1.00	34.20	N
ATOM	4455	CA	GLU	A	565	39.522	15.830	32.269	1.00	33.71	C
ATOM	4456	C	GLU	A	565	39.123	16.707	33.477	1.00	33.57	C
ATOM	4457	O	GLU	A	565	39.325	16.298	34.620	1.00	36.71	O
ATOM	4458	CB	GLU	A	565	41.038	15.547	32.203	1.00	31.00	C
ATOM	4459	CG	GLU	A	565	41.948	16.433	33.029	1.00	28.71	C
ATOM	4460	CD	GLU	A	565	41.705	17.906	32.810	1.00	28.14	C
ATOM	4461	OE1	GLU	A	565	41.476	18.343	31.664	1.00	27.94	O
ATOM	4462	OE2	GLU	A	565	41.605	18.611	33.826	1.00	31.46	O1-
ATOM	4463	N	THR	A	566	38.550	17.891	33.230	1.00	31.43	N
ATOM	4464	CA	THR	A	566	37.891	18.648	34.290	1.00	30.06	C
ATOM	4465	C	THR	A	566	36.888	17.740	34.978	1.00	31.89	C
ATOM	4466	O	THR	A	566	37.183	17.117	36.017	1.00	33.59	O
ATOM	4467	CB	THR	A	566	37.091	19.837	33.754	1.00	27.34	C
ATOM	4468	CG2	THR	A	566	37.562	21.118	34.385	1.00	29.75	C
ATOM	4469	OG1	THR	A	566	37.226	19.915	32.329	1.00	28.29	O
ATOM	4470	N	CYS	A	567	35.700	17.644	34.390	1.00	32.18	N

ATOM	4471	CA	CYS	A	567	34.654	16.825	34.979	1.00	31.39	C
ATOM	4472	C	CYS	A	567	34.889	15.378	34.594	1.00	29.93	C
ATOM	4473	O	CYS	A	567	34.352	14.909	33.590	1.00	29.42	O
ATOM	4474	CB	CYS	A	567	33.262	17.276	34.513	1.00	29.68	C
ATOM	4475	SG	CYS	A	567	33.055	19.080	34.407	1.00	25.19	S
ATOM	4476	N	PHE	A	568	35.686	14.688	35.405	1.00	28.61	N
ATOM	4477	CA	PHE	A	568	35.928	13.255	35.250	1.00	28.31	C
ATOM	4478	C	PHE	A	568	36.751	12.792	36.449	1.00	29.41	C
ATOM	4479	O	PHE	A	568	36.664	11.642	36.860	1.00	31.51	O
ATOM	4480	CB	PHE	A	568	36.729	12.998	33.976	1.00	25.95	C
ATOM	4481	CG	PHE	A	568	36.206	11.876	33.139	1.00	21.28	C
ATOM	4482	CD1	PHE	A	568	35.062	12.035	32.394	1.00	20.57	C
ATOM	4483	CD2	PHE	A	568	36.903	10.698	33.038	1.00	20.14	C
ATOM	4484	CE1	PHE	A	568	34.622	11.051	31.574	1.00	17.15	C
ATOM	4485	CE2	PHE	A	568	36.471	9.710	32.217	1.00	17.57	C
ATOM	4486	CZ	PHE	A	568	35.321	9.888	31.481	1.00	19.73	C
ATOM	4487	N	ALA	A	569	37.683	13.636	36.877	1.00	28.87	N
ATOM	4488	CA	ALA	A	569	38.383	13.420	38.134	1.00	28.65	C
ATOM	4489	C	ALA	A	569	37.468	13.939	39.220	1.00	28.03	C
ATOM	4490	O	ALA	A	569	37.356	13.378	40.309	1.00	26.78	O
ATOM	4491	CB	ALA	A	569	39.710	14.213	38.138	1.00	30.00	C
ATOM	4492	N	GLU	A	570	36.832	15.057	38.898	1.00	30.62	N
ATOM	4493	CA	GLU	A	570	36.151	15.878	39.882	1.00	30.63	C
ATOM	4494	C	GLU	A	570	34.945	15.123	40.390	1.00	30.05	C
ATOM	4495	O	GLU	A	570	35.001	14.560	41.483	1.00	29.90	O
ATOM	4496	CB	GLU	A	570	35.749	17.210	39.258	1.00	28.89	C
ATOM	4497	CG	GLU	A	570	36.936	18.084	38.893	1.00	27.66	C
ATOM	4498	CD	GLU	A	570	36.512	19.417	38.301	1.00	29.60	C
ATOM	4499	OE1	GLU	A	570	35.295	19.714	38.265	1.00	27.40	O
ATOM	4500	OE2	GLU	A	570	37.407	20.200	37.922	1.00	31.42	O1-
ATOM	4501	N	GLU	A	571	33.921	15.009	39.544	1.00	28.64	N
ATOM	4502	CA	GLU	A	571	32.793	14.109	39.781	1.00	29.73	C
ATOM	4503	C	GLU	A	571	33.172	12.828	40.555	1.00	29.42	C
ATOM	4504	O	GLU	A	571	32.703	12.600	41.666	1.00	26.88	O
ATOM	4505	CB	GLU	A	571	32.153	13.698	38.444	1.00	31.90	C
ATOM	4506	CG	GLU	A	571	31.887	14.842	37.444	1.00	33.12	C
ATOM	4507	CD	GLU	A	571	30.475	15.396	37.551	1.00	31.21	C
ATOM	4508	OE1	GLU	A	571	30.276	16.300	38.392	1.00	29.20	O
ATOM	4509	OE2	GLU	A	571	29.584	14.930	36.791	1.00	28.63	O1-
ATOM	4510	N	GLY	A	572	34.072	12.032	39.986	1.00	29.49	N
ATOM	4511	CA	GLY	A	572	34.301	10.677	40.478	1.00	28.71	C
ATOM	4512	C	GLY	A	572	34.559	10.612	41.965	1.00	25.97	C
ATOM	4513	O	GLY	A	572	34.133	9.670	42.649	1.00	25.03	O
ATOM	4514	N	LYS	A	573	35.292	11.596	42.463	1.00	25.00	N
ATOM	4515	CA	LYS	A	573	35.292	11.839	43.886	1.00	26.40	C
ATOM	4516	C	LYS	A	573	33.907	12.403	44.227	1.00	27.40	C
ATOM	4517	O	LYS	A	573	33.053	11.637	44.652	1.00	28.80	O
ATOM	4518	CB	LYS	A	573	36.422	12.802	44.278	1.00	25.67	C
ATOM	4519	CG	LYS	A	573	37.835	12.284	43.924	1.00	24.04	C
ATOM	4520	CD	LYS	A	573	38.725	12.132	45.169	1.00	21.49	C
ATOM	4521	CE	LYS	A	573	39.633	13.331	45.408	1.00	17.20	C
ATOM	4522	NZ	LYS	A	573	40.867	12.848	46.062	1.00	15.20	N1+
ATOM	4523	N	LYS	A	574	33.581	13.580	43.695	1.00	26.75	N
ATOM	4524	CA	LYS	A	574	32.400	14.324	44.131	1.00	25.51	C
ATOM	4525	C	LYS	A	574	30.989	13.898	43.651	1.00	25.42	C
ATOM	4526	O	LYS	A	574	30.011	14.569	44.005	1.00	25.17	O
ATOM	4527	CB	LYS	A	574	32.612	15.817	43.872	1.00	27.14	C
ATOM	4528	CG	LYS	A	574	32.851	16.209	42.416	1.00	28.72	C
ATOM	4529	CD	LYS	A	574	32.816	17.739	42.193	1.00	28.75	C
ATOM	4530	CE	LYS	A	574	31.382	18.254	41.916	1.00	28.20	C
ATOM	4531	NZ	LYS	A	574	31.384	19.599	41.254	1.00	28.78	N1+
ATOM	4532	N	LEU	A	575	30.860	12.683	43.105	1.00	23.44	N
ATOM	4533	CA	LEU	A	575	29.559	12.086	42.759	1.00	25.31	C
ATOM	4534	C	LEU	A	575	29.409	10.605	43.176	1.00	27.47	C
ATOM	4535	O	LEU	A	575	28.300	10.045	43.137	1.00	26.81	O
ATOM	4536	CB	LEU	A	575	29.301	12.205	41.264	1.00	24.20	C
ATOM	4537	CG	LEU	A	575	28.778	10.958	40.541	1.00	24.99	C
ATOM	4538	CD1	LEU	A	575	27.265	11.091	40.260	1.00	22.96	C
ATOM	4539	CD2	LEU	A	575	29.587	10.746	39.253	1.00	23.54	C
ATOM	4540	N	VAL	A	576	30.545	9.953	43.443	1.00	30.48	N
ATOM	4541	CA	VAL	A	576	30.594	8.583	43.980	1.00	28.40	C

ATOM	4542	C	VAL	A	576	30.933	8.698	45.451	1.00	26.50		C
ATOM	4543	O	VAL	A	576	30.389	7.969	46.264	1.00	26.24		O
ATOM	4544	CB	VAL	A	576	31.703	7.709	43.313	1.00	29.72		C
ATOM	4545	CG1	VAL	A	576	31.613	6.269	43.830	1.00	31.31		C
ATOM	4546	CG2	VAL	A	576	31.568	7.728	41.788	1.00	28.27		C
ATOM	4547	N	ALA	A	577	31.839	9.614	45.783	1.00	26.23		N
ATOM	4548	CA	ALA	A	577	32.042	10.018	47.171	1.00	27.55		C
ATOM	4549	C	ALA	A	577	30.723	10.465	47.754	1.00	27.60		C
ATOM	4550	O	ALA	A	577	30.498	10.341	48.959	1.00	29.06		O
ATOM	4551	CB	ALA	A	577	33.057	11.163	47.280	1.00	24.38		C
ATOM	4552	N	ALA	A	578	29.896	11.084	46.921	1.00	26.48		N
ATOM	4553	CA	ALA	A	578	28.663	11.639	47.421	1.00	28.56		C
ATOM	4554	C	ALA	A	578	27.604	10.545	47.504	1.00	30.37		C
ATOM	4555	O	ALA	A	578	26.515	10.788	48.040	1.00	32.62		O
ATOM	4556	CB	ALA	A	578	28.198	12.775	46.522	1.00	27.95		C
ATOM	4557	N	SER	A	579	27.969	9.336	47.045	1.00	30.43		N
ATOM	4558	CA	SER	A	579	27.041	8.214	46.794	1.00	28.38		C
ATOM	4559	C	SER	A	579	26.717	7.338	48.012	1.00	28.20		C
ATOM	4560	O	SER	A	579	27.423	7.379	49.026	1.00	27.16		O
ATOM	4561	CB	SER	A	579	27.600	7.308	45.678	1.00	26.10		C
ATOM	4562	OG	SER	A	579	27.127	7.695	44.407	1.00	21.67		O
ATOM	4563	N	GLN	A	580	25.858	6.349	47.756	1.00	28.20		N
ATOM	4564	CA	GLN	A	580	25.294	5.456	48.775	1.00	30.20		C
ATOM	4565	C	GLN	A	580	25.251	5.794	50.275	1.00	29.79		C
ATOM	4566	O	GLN	A	580	24.240	6.301	50.763	1.00	29.46		O
ATOM	4567	CB	GLN	A	580	25.887	4.059	48.652	1.00	31.82		C
ATOM	4568	CG	GLN	A	580	24.809	3.035	48.450	1.00	35.01		C
ATOM	4569	CD	GLN	A	580	24.605	2.755	46.984	1.00	39.20		C
ATOM	4570	NE2	GLN	A	580	24.214	3.795	46.222	1.00	39.46		N
ATOM	4571	OE1	GLN	A	580	24.873	1.642	46.513	1.00	37.19		O
ATOM	4572	N	ALA	A	581	26.147	5.153	51.022	1.00	28.09		N
ATOM	4573	CA	ALA	A	581	25.904	4.949	52.433	1.00	28.48		C
ATOM	4574	C	ALA	A	581	26.749	5.880	53.305	1.00	31.33		C
ATOM	4575	O	ALA	A	581	27.878	5.542	53.689	1.00	33.68		O
ATOM	4576	CB	ALA	A	581	26.139	3.517	52.786	1.00	27.41		C
ATOM	4577	N	ALA	A	582	26.292	7.133	53.354	1.00	32.13		N
ATOM	4578	CA	ALA	A	582	26.690	8.140	54.330	1.00	30.12		C
ATOM	4579	C	ALA	A	582	25.992	9.430	53.865	1.00	32.98		C
ATOM	4580	O	ALA	A	582	25.336	10.117	54.686	1.00	34.50		O
ATOM	4581	CB	ALA	A								

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