A	14	GLN	10	−15.804	−15.136
A	15	CYS	11	−16.940	−16.257
A	16	VAL	18	−13.814	−14.296
A	17	ASN	2	−12.033	−10.879
A	18	LEU	37	−12.538	−15.351
A	19	THR	4	−9.041	−8.461
A	20	THR	22	−7.975	−9.588
A	21	ARG	24	−7.797	−9.660
A	22	THR	15	−7.170	−8.071
A	23	GLN	0	−5.233	−4.631
A	24	LEU	20	−5.108	−6.821
A	25	PRO	2	−5.347	−4.962
A	26	PRO	8	−8.716	−8.633
A	27	ALA	18	−9.417	−10.404
A	28	TYR	9	−10.452	−10.285
A	29	THR	21	−12.607	−13.572
A	30	ASN	9	−14.402	−13.780
A	31	SER	31	−15.888	−17.626
A	32	PHE	14	−16.638	−16.335
A	33	THR	17	−18.078	−17.954
A	34	ARG	34	−17.661	−19.540
A	35	GLY	40	−20.459	−22.706
A	36	VAL	30	−19.654	−20.844
A	37	TYR	35	−16.646	−18.757
A	38	TYR	21	−14.578	−15.316
A	39	PRO	25	−14.570	−15.769
A	40	ASP	12	−11.028	−11.139
A	41	LYS	7	−6.723	−6.755
A	42	VAL	9	−12.037	−11.687
A	43	PHE	5	−10.921	−10.240
A	44	ARG	22	−14.424	−15.295
A	45	SER	12	−14.324	−14.057
A	46	SER	12	−15.774	−15.340
A	47	VAL	18	−18.902	−18.798
A	48	LEU	20	−19.829	−19.849
A	49	HIS	26	−19.385	−20.146
A	50	SER	16	−19.149	−18.787
A	51	THR	22	−17.723	−18.215
A	52	GLN	6	−14.983	−13.950
A	53	ASP	24	−14.217	−15.342
A	54	LEU	21	−16.606	−17.112
A	55	PHE	33	−19.757	−21.280
A	56	LEU	34	−18.960	−20.689
A	57	PRO	22	−20.455	−20.633
A	58	PHE	26	−21.121	−21.682
A	59	PHE	12	−18.967	−18.166
A	60	SER	26	−16.737	−17.802
A	61	ASN	5	−14.786	−13.660
A	62	VAL	36	−15.693	−18.029
A	63	THR	21	−13.803	−14.630

A	64	TRP	21	−14.415	−15.172	
A	65	PHE	24	−16.105	−17.013	
A	66	HIS	21	−13.413	−14.285	
A	67	ALA	33	−13.789	−15.998	
A	68	ILE	15	−8.977	−9.670	
A	69	HIS	28	−5.340	−7.946	
A	70	VAL	12	−3.132	−4.151	
A	71	SER	7	−2.082	−2.648	<=B
A	72	GLY	1	−1.446	−1.394	<=B
A	73	THR	15	−1.454	−3.012	<=B
A	74	ASN	12	−1.337	−2.563	<=B
A	75	GLY	12	−2.813	−3.869	
A	76	THR	33	−5.184	−8.383	
A	77	LYS	13	−7.864	−8.454	
A	78	ARG	16	−10.155	−10.828	
A	79	PHE	27	−14.759	−16.166	
A	80	ASP	23	−17.407	−18.050	
A	81	ASN	34	−21.431	−22.876	
A	82	PRO	20	−19.179	−19.273	
A	83	VAL	18	−20.801	−20.479	
A	84	LEU	27	−20.770	−21.486	
A	85	PRO	8	−14.059	−13.362	
A	86	PHE	30	−17.377	−18.828	
A	87	ASN	3	−12.359	−11.283	
A	88	ASP	11	−13.290	−13.027	
A	89	GLY	27	−19.951	−20.762	
A	90	VAL	25	−22.274	−22.588	
A	91	TYR	38	−21.701	−23.575	
A	92	PHE	33	−25.157	−26.059	
A	93	ALA	42	−20.652	−23.107	
A	94	SER	24	−18.964	−19.543	
A	95	ILE	26	−14.062	−15.435	
A	96	GLU	27	−13.441	−15.000	
A	97	LYS	21	−6.381	−8.062	
A	98	SER	29	−6.029	−8.670	
A	99	ASN	20	−13.122	−13.913	
A	100	ILE	34	−17.273	−19.197	
A	101	ILE	30	−22.552	−23.408	
A	102	ARG	37	−24.081	−25.566	
A	103	GLY	33	−28.550	−29.062	
A	104	TRP	26	−30.047	−29.582	
A	105	ILE	32	−28.789	−29.158	
A	106	PHE	35	−26.009	−27.043	
A	107	GLY	31	−21.998	−23.034	
A	108	THR	11	−15.701	−15.160	
A	109	THR	13	−13.433	−13.384	
A	110	LEU	25	−18.665	−19.394	
A	111	ASP	4	−14.142	−12.976	
A	112	SER	17	−14.946	−15.182	
A	113	LYS	7	−9.633	−9.330	

A	114	THR	13	−11.711	−11.859	
A	115	GLN	17	−15.472	−15.648	
A	116	SER	32	−20.866	−22.147	
A	117	LEU	31	−23.441	−24.310	
A	118	LEU	37	−27.350	−28.460	
A	119	ILE	23	−27.944	−27.376	
A	120	VAL	28	−26.761	−26.904	
A	121	ASN	16	−23.492	−22.631	
A	122	ASN	23	−20.596	−20.872	
A	123	ALA	16	−13.846	−14.094	
A	124	THR	7	−11.542	−11.020	
A	125	ASN	11	−16.739	−16.079	
A	126	VAL	13	−21.608	−20.618	
A	127	VAL	17	−22.241	−21.638	
A	128	ILE	17	−22.662	−22.011	
A	129	LYS	21	−21.911	−21.806	
A	130	VAL	18	−20.483	−20.197	
A	131	CYS	22	−18.897	−19.254	
A	132	GLU	6	−15.936	−14.793	
A	133	PHE	33	−19.572	−21.116	
A	134	GLN	7	−17.914	−16.658	
A	135	PHE	34	−21.810	−23.212	
A	136	CYS	21	−19.399	−19.583	
A	137	ASN	5	−15.808	−14.565	
A	138	ASP	18	−19.020	−18.903	
A	139	PRO	28	−23.835	−24.314	
A	140	PHE	29	−24.179	−24.734	
A	141	LEU	30	−20.065	−21.207	
A	142	ASP	23	−13.961	−15.001	
A	143	VAL	28	−8.243	−10.515	
A	144	TYR	9	−4.945	−5.411	
A	145	TYR	22	−1.928	−4.236	
A	146	HIS	10	0.901	−0.352	<=B
A	147	LYS	15	1.134	−0.722	<=B
A	148	ASN	0	3.409	3.017	<=B
A	149	ASN	10	2.814	1.340	<=B
A	150	LYS	0	2.743	2.428	<=B
A	151	SER	9	1.438	0.237	<=B
A	152	TRP	23	−1.703	−4.152	
A	153	MET	6	−5.519	−5.574	
A	154	GLU	24	−9.273	−10.967	
A	155	SER	17	−8.710	−9.663	
A	156	GLU	28	−13.613	−15.267	
A	157	PHE	19	−19.068	−19.060	
A	158	ARG	22	−20.522	−20.692	
A	159	VAL	34	−25.845	−26.783	
A	160	TYR	31	−21.737	−22.803	
A	161	SER	11	−17.856	−17.067	
A	162	SER	10	−17.047	−16.237	
A	163	ALA	17	−17.883	−17.781	

A	164	ASN	14	−14.832	−14.736	
A	165	ASN	12	−12.670	−12.593	
A	166	CYS	16	−15.990	−15.991	
A	167	THR	14	−14.397	−14.352	
A	168	PHE	19	−15.648	−16.033	
A	169	GLU	8	−17.122	−16.073	
A	170	TYR	15	−16.648	−16.459	
A	171	VAL	9	−16.490	−15.629	
A	172	SER	18	−13.532	−14.046	
A	173	GLN	0	−9.644	−8.535	
A	174	PRO	1	−9.619	−8.628	
A	175	PHE	12	−5.915	−6.614	
A	176	LEU	7	−4.946	−5.182	
A	177	MET	19	−6.193	−7.666	
A	178	ASP	9	−4.867	−5.342	
A	179	LEU	30	−7.119	−9.750	
A	180	GLU	10	−3.195	−3.978	
A	181	GLY	19	−1.590	−3.592	<=B
A	182	LYS	16	−0.550	−2.327	<=B
A	183	GLN	14	−0.193	−1.780	<=B
A	184	GLY	0	−0.756	−0.669	<=B
A	185	ASN	9	−3.286	−3.943	
A	186	PHE	27	−5.532	−8.001	
A	187	LYS	9	−6.229	−6.548	
A	188	ASN	23	−10.984	−12.366	
A	189	LEU	25	−14.148	−15.396	
A	190	ARG	17	−17.501	−17.444	
A	191	GLU	33	−20.523	−21.958	
A	192	PHE	26	−23.502	−23.789	
A	193	VAL	29	−21.295	−22.181	
A	194	PHE	34	−23.486	−24.696	
A	195	LYS	25	−20.940	−21.407	
A	196	ASN	23	−13.909	−14.954	
A	197	ILE	18	−11.280	−12.052	
A	198	ASP	1	−7.002	−6.312	
A	199	GLY	3	−10.761	−9.868	
A	200	TYR	10	−13.504	−13.101	
A	201	PHE	28	−15.991	−17.372	
A	202	LYS	22	−17.718	−18.210	
A	203	ILE	22	−19.691	−19.956	
A	204	TYR	27	−17.321	−18.434	
A	205	SER	19	−17.200	−17.407	
A	206	LYS	23	−15.116	−16.023	
A	207	HIS	7	−11.270	−10.779	
A	208	THR	18	−8.367	−9.475	
A	209	PRO	0	−4.786	−4.236	
A	210	ILE	28	−5.270	−7.884	
A	211	ASN	0	−3.802	−3.365	<=B
A	212	LEU	17	−5.599	−6.910	
A	213	VAL	1	−4.229	−3.858	

A	214	ARG	6	-6.416	-6.368	
A	215	ASP	10	-10.311	-10.275	
A	216	LEU	31	-13.410	-15.433	
A	217	PRO	23	-10.515	-11.950	
A	218	GLN	2	-11.750	-10.629	
A	219	GLY	17	-13.189	-13.627	
A	220	PHE	20	-14.713	-15.321	
A	221	SER	19	-14.179	-14.733	
A	222	ALA	25	-15.795	-16.853	
A	223	LEU	29	-17.462	-18.789	
A	224	GLU	8	-12.070	-11.602	
A	225	PRO	14	-12.689	-12.840	
A	226	LEU	15	-12.204	-12.526	
A	227	VAL	11	-14.489	-14.088	
A	228	ASP	9	-12.367	-11.980	
A	229	LEU	31	-15.702	-17.461	
A	230	PRO	0	-11.667	-10.325	
A	231	ILE	32	-15.912	-17.762	
A	232	GLY	7	-13.209	-12.495	
A	233	ILE	39	-15.693	-18.373	
A	234	ASN	9	-14.445	-13.819	
A	235	ILE	33	-17.647	-19.412	
A	236	THR	7	-14.492	-13.630	
A	237	ARG	13	-19.759	-18.982	
A	238	PHE	35	-24.964	-26.118	
A	239	GLN	29	-26.489	-26.778	
A	240	THR	30	-28.055	-28.279	
A	241	LEU	29	-27.257	-27.457	
A	242	LEU	34	-24.030	-25.176	
A	243	ALA	29	-18.623	-19.817	
A	244	LEU	33	-14.542	-16.664	
A	245	HIS	34	-8.328	-11.280	
A	246	ARG	18	-5.011	-6.505	
A	247	SER	18	-1.569	-3.458	<=B
A	248	TYR	11	-0.630	-1.823	<=B
A	249	LEU	13	-1.686	-2.987	<=B
A	250	THR	11	-1.235	-2.358	<=B
A	251	PRO	0	-0.206	-0.182	<=B
A	252	GLY	2	-1.948	-1.954	<=B
A	253	ASP	17	-3.860	-5.371	
A	254	SER	3	-4.867	-4.652	
A	255	SER	11	-6.927	-7.395	
A	256	SER	11	-7.302	-7.727	
A	257	GLY	8	-5.796	-6.049	
A	258	TRP	30	-5.821	-8.602	
A	259	THR	24	-5.560	-7.681	
A	260	ALA	28	-11.340	-13.256	
A	261	GLY	33	-9.983	-12.630	
A	262	ALA	19	-8.493	-9.701	
A	263	ALA	33	-11.443	-13.922	

A	264	ALA	23	−14.852	−15.789
A	265	TYR	34	−19.395	−21.074
A	266	TYR	31	−17.823	−19.338
A	267	VAL	26	−21.397	−21.926
A	268	GLY	31	−20.572	−21.771
A	269	TYR	14	−18.374	−17.871
A	270	LEU	30	−18.470	−19.796
A	271	GLN	22	−14.537	−15.396
A	272	PRO	6	−14.084	−13.154
A	273	ARG	31	−16.304	−17.994
A	274	THR	19	−18.138	−18.237
A	275	PHE	27	−19.621	−20.470
A	276	LEU	21	−19.428	−19.608
A	277	LEU	32	−17.747	−19.386
A	278	LYS	18	−17.003	−17.118
A	279	TYR	22	−16.285	−16.942
A	280	ASN	8	−12.016	−11.554
A	281	GLU	3	−9.983	−9.180
A	282	ASN	5	−7.334	−7.066
A	283	GLY	10	−11.365	−11.208
A	284	THR	8	−12.289	−11.796
A	285	ILE	29	−15.124	−16.720
A	286	THR	13	−13.987	−13.873
A	287	ASP	13	−15.421	−15.143
A	288	ALA	32	−18.037	−19.643
A	289	VAL	26	−19.224	−20.003
A	290	ASP	24	−21.176	−21.501
A	291	CYS	25	−22.292	−22.603
A	292	ALA	24	−25.056	−24.934
A	293	LEU	28	−24.004	−24.463
A	294	ASP	21	−25.249	−24.760
A	295	PRO	32	−26.090	−26.769
A	296	LEU	22	−26.186	−25.705
A	297	SER	23	−23.431	−23.382
A	298	GLU	26	−24.466	−24.642
A	299	THR	26	−23.526	−23.811
A	300	LYS	31	−18.642	−20.063
A	301	CYS	23	−21.100	−21.318
A	302	THR	23	−19.400	−19.814
A	303	LEU	23	−18.116	−18.678
A	304	LYS	13	−19.137	−18.431
A	305	SER	12	−19.669	−18.787
A	306	PHE	15	−17.489	−17.203
A	307	THR	5	−16.003	−14.737
A	308	VAL	30	−19.958	−21.113
A	309	GLU	6	−18.937	−17.449
A	310	LYS	18	−19.296	−19.147
A	311	GLY	10	−20.820	−19.576
A	312	ILE	29	−23.754	−24.358
A	313	TYR	27	−23.433	−23.843

A	314	GLN	8	−23.147	−21.405
A	315	THR	32	−23.419	−24.406
A	316	SER	20	−23.449	−23.052
A	317	ASN	9	−21.178	−19.777
A	318	PHE	34	−23.502	−24.709
A	319	ARG	12	−20.124	−19.189
A	320	VAL	29	−19.554	−20.640
A	321	GLN	12	−14.961	−14.621
A	322	PRO	18	−12.757	−13.360
A	323	THR	16	−10.553	−11.179
A	324	GLU	12	−10.418	−10.600
A	325	SER	8	−12.538	−12.017
A	326	ILE	27	−12.740	−14.379
A	327	VAL	17	−14.695	−14.960
A	328	ARG	31	−13.546	−15.553
A	329	PHE	25	−13.651	−14.956
A	330	PRO	21	−12.103	−13.126
A	331	ASN	5	−11.956	−11.156
A	332	ILE	25	−14.208	−15.449
A	333	THR	1	−12.126	−10.846
A	334	ASN	10	−14.182	−13.701
A	335	LEU	12	−20.834	−19.818
A	336	CYS	33	−25.134	−26.039
A	337	PRO	19	−24.662	−24.011
A	338	PHE	18	−27.399	−26.318
A	339	GLY	5	−20.426	−18.652
A	340	GLU	15	−20.039	−19.459
A	341	VAL	30	−24.041	−24.726
A	342	PHE	25	−21.683	−22.064
A	343	ASN	8	−15.761	−14.869
A	344	ALA	21	−12.342	−13.338
A	345	THR	1	−7.344	−6.614
A	346	ARG	12	−7.511	−8.027
A	347	PHE	38	−11.340	−14.406
A	348	ALA	23	−8.877	−10.501
A	349	SER	24	−5.027	−7.209
A	350	VAL	38	−7.357	−10.881
A	351	TYR	19	−4.912	−6.532
A	352	ALA	11	−5.293	−5.949
A	353	TRP	33	−8.721	−11.513
A	354	ASN	21	−12.512	−13.488
A	355	ARG	17	−19.240	−18.983
A	356	LYS	21	−22.584	−22.402
A	357	ARG	7	−22.637	−20.839
A	358	ILE	34	−25.973	−26.896
A	359	SER	11	−22.197	−20.909
A	360	ASN	0	−17.751	−15.710
A	361	CYS	20	−20.818	−20.724
A	362	VAL	12	−22.290	−21.107
A	363	ALA	31	−26.573	−27.082

A	364	ASP	14	−24.754	−23.518
A	365	TYR	30	−27.747	−28.006
A	366	SER	9	−22.296	−20.767
A	367	VAL	13	−21.679	−20.681
A	368	LEU	34	−25.155	−26.172
A	369	TYR	16	−23.307	−22.467
A	370	ASN	5	−19.117	−17.493
A	371	SER	19	−18.209	−18.300
A	372	ALA	0	−12.773	−11.305
A	373	SER	19	−12.937	−13.634
A	374	PHE	24	−17.151	−17.939
A	375	SER	17	−13.056	−13.510
A	376	THR	31	−16.133	−17.843
A	377	PHE	17	−23.469	−22.725
A	378	LYS	15	−22.474	−21.615
A	379	CYS	18	−25.234	−24.402
A	380	TYR	24	−21.328	−21.635
A	381	GLY	23	−20.983	−21.215
A	382	VAL	24	−23.124	−23.225
A	383	SER	5	−22.200	−20.222
A	384	PRO	15	−23.068	−22.140
A	385	THR	0	−21.740	−19.240
A	386	LYS	13	−22.841	−21.709
A	387	LEU	27	−25.764	−25.906
A	388	ASN	11	−23.769	−22.301
A	389	ASP	5	−20.833	−19.012
A	390	LEU	24	−23.573	−23.622
A	391	CYS	20	−24.773	−24.224
A	392	PHE	31	−25.298	−25.954
A	393	THR	11	−21.689	−20.460
A	394	ASN	6	−23.520	−21.505
A	395	VAL	31	−27.344	−27.764
A	396	TYR	13	−26.135	−24.625
A	397	ALA	28	−26.535	−26.704
A	398	ASP	26	−22.560	−22.956
A	399	SER	22	−19.220	−19.539
A	400	PHE	33	−11.948	−14.369
A	401	VAL	31	−10.200	−12.592
A	402	ILE	35	−7.476	−10.641
A	403	ARG	25	−4.882	−7.195
A	404	GLY	16	−6.071	−7.212
A	405	ASP	12	−3.360	−4.354
A	406	GLU	29	−4.216	−7.067
A	407	VAL	23	−8.877	−10.502
A	408	ARG	6	−8.867	−8.537
A	409	GLN	27	−7.163	−9.444
A	410	ILE	35	−11.917	−14.572
A	411	ALA	11	−13.019	−12.787
A	412	PRO	18	−9.636	−10.598
A	413	GLY	6	−5.469	−5.530

A	414	GLN	21	-4.386	-6.296	
A	415	THR	2	-2.619	-2.548	<=B
A	416	GLY	17	-3.231	-4.815	
A	417	LYS	18	-2.008	-3.847	
A	418	ILE	25	-5.283	-7.551	
A	419	ALA	17	-5.648	-6.954	
A	420	ASP	11	-3.285	-4.172	
A	421	TYR	23	-3.193	-5.471	
A	422	ASN	32	-5.564	-8.604	
A	423	TYR	31	-7.324	-10.047	
A	424	LYS	20	-7.142	-8.621	
A	425	LEU	32	-12.202	-14.479	
A	426	PRO	14	-9.978	-10.441	
A	427	ASP	0	-6.310	-5.584	
A	428	ASP	3	-10.613	-9.738	
A	429	PHE	27	-18.486	-19.465	
A	430	THR	14	-23.514	-22.420	
A	431	GLY	32	-27.746	-28.236	
A	432	CYS	27	-28.143	-28.011	
A	433	VAL	24	-25.052	-24.931	
A	434	ILE	31	-23.339	-24.220	
A	435	ALA	25	-15.861	-16.912	
A	436	TRP	20	-14.197	-14.864	
A	437	ASN	14	-7.126	-7.917	
A	438	SER	33	-6.666	-9.694	
A	439	ASN	19	-1.734	-3.720	
A	440	ASN	4	-1.707	-1.971	<=B
A	441	LEU	20	-3.449	-5.352	
A	442	ASP	33	-2.677	-6.164	
A	443	SER	23	0.144	-2.518	<=B
A	444	LYS	9	2.892	1.525	<=B
A	445	VAL	1	4.330	3.717	<=B
A	446	GLY	2	4.564	3.809	<=B
A	447	GLY	9	3.491	2.054	<=B
A	448	ASN	26	1.458	-1.700	<=B
A	449	TYR	5	0.970	0.284	<=B
A	450	ASN	18	0.558	-1.576	<=B
A	451	TYR	31	-2.873	-6.108	
A	452	ARG	18	-2.021	-3.858	
A	453	TYR	27	-2.977	-5.739	
A	454	ARG	30	-1.018	-4.351	
A	455	LEU	15	-1.884	-3.392	<=B
A	456	PHE	14	-1.975	-3.358	<=B
A	457	ARG	24	-0.868	-3.529	<=B
A	458	LYS	10	-0.251	-1.372	<=B
A	459	SER	5	0.429	-0.196	<=B
A	460	ASN	14	0.062	-1.556	<=B
A	461	LEU	26	-2.217	-4.952	
A	462	LYS	1	-1.747	-1.661	<=B
A	463	PRO	12	-6.547	-7.174	

A	464	PHE	18	-9.411	-10.399	
A	465	GLU	16	-4.254	-5.605	
A	466	ARG	12	-4.061	-4.974	
A	467	ASP	28	-2.594	-5.515	
A	468	ILE	2	-2.503	-2.445	<=B
A	469	SER	20	-1.615	-3.729	
A	470	THR	7	-2.609	-3.114	<=B
A	471	GLU	10	-2.936	-3.748	
A	472	ILE	16	-3.934	-5.321	
A	473	TYR	17	-3.289	-4.866	
A	474	GLN	8	-3.641	-4.142	
A	475	ALA	11	-4.059	-4.857	
A	476	GLY	10	-3.722	-4.444	
A	477	SER	0	-3.398	-3.007	<=B
A	478	THR	9	-4.217	-4.767	
A	479	PRO	1	-3.802	-3.480	<=B
A	480	CYS	18	-4.548	-6.095	
A	481	ASN	0	-3.940	-3.487	<=B
A	482	GLY	5	-4.003	-4.118	
A	483	VAL	0	-4.254	-3.764	
A	484	GLN	0	-4.490	-3.974	
A	485	GLY	16	-4.926	-6.199	
A	486	PHE	2	-4.958	-4.618	
A	487	ASN	5	-4.047	-4.157	
A	488	CYS	20	-5.205	-6.906	
A	489	TYR	11	-4.278	-5.051	
A	490	PHE	9	-4.024	-4.596	
A	491	PRO	21	-3.000	-5.070	
A	492	LEU	19	-1.724	-3.711	
A	493	GLN	13	-1.132	-2.497	<=B
A	494	SER	13	-0.363	-1.816	<=B
A	495	TYR	35	-0.512	-4.478	
A	496	GLY	4	1.987	1.299	<=B
A	497	PHE	32	0.715	-3.047	<=B
A	498	GLN	7	2.618	1.512	<=B
A	499	PRO	7	2.701	1.585	<=B
A	500	THR	3	3.644	2.880	<=B
A	501	ASN	27	3.594	0.075	<=B
A	502	GLY	1	2.379	1.990	<=B
A	503	VAL	7	-0.651	-1.381	<=B
A	504	GLY	5	-3.828	-3.963	
A	505	TYR	8	0.289	-0.664	<=B
A	506	GLN	17	-2.241	-3.938	
A	507	PRO	32	-4.580	-7.733	
A	508	TYR	25	-8.017	-9.970	
A	509	ARG	27	-13.451	-15.009	
A	510	VAL	37	-17.507	-19.748	
A	511	VAL	26	-23.727	-23.988	
A	512	VAL	30	-26.348	-26.768	
A	513	LEU	37	-29.531	-30.390	

A	514	SER	22	−27.127	−26.538	
A	515	PHE	38	−28.264	−29.384	
A	516	GLU	11	−24.019	−22.522	
A	517	LEU	16	−22.895	−22.102	
A	518	LEU	10	−19.053	−18.012	
A	519	HIS	7	−15.478	−14.503	
A	520	ALA	11	−15.966	−15.395	
A	521	PRO	9	−16.790	−15.894	
A	522	ALA	30	−20.627	−21.705	
A	523	THR	11	−21.128	−19.963	
A	524	VAL	27	−24.984	−25.216	
A	525	CYS	19	−23.642	−23.109	
A	526	GLY	19	−22.235	−21.863	
A	527	PRO	13	−18.020	−17.443	
A	528	LYS	13	−14.308	−14.157	
A	529	LYS	16	−15.309	−15.388	
A	530	SER	22	−13.341	−14.337	
A	531	THR	12	−11.096	−11.200	
A	532	ASN	2	−8.679	−7.911	
A	533	LEU	21	−9.265	−10.615	
A	534	VAL	16	−6.128	−7.264	
A	535	LYS	13	−8.031	−8.603	
A	536	ASN	3	−10.760	−9.867	
A	537	LYS	13	−11.854	−11.986	
A	538	CYS	19	−13.582	−14.205	
A	539	VAL	23	−12.072	−13.328	
A	540	ASN	5	−13.323	−12.366	
A	541	PHE	32	−12.977	−15.164	
A	542	ASN	17	−14.503	−14.790	
A	543	PHE	29	−13.979	−15.706	
A	544	ASN	20	−15.065	−15.633	
A	545	GLY	18	−16.677	−16.829	
A	546	LEU	21	−14.173	−14.958	
A	547	THR	9	−13.589	−13.061	
A	548	GLY	22	−13.049	−14.078	
A	549	THR	9	−13.322	−12.825	
A	550	GLY	21	−13.163	−14.064	
A	551	VAL	14	−12.733	−12.879	
A	552	LEU	27	−10.532	−12.425	
A	553	THR	15	−9.398	−10.042	
A	554	GLU	5	−6.134	−6.004	
A	555	SER	24	−5.336	−7.482	
A	556	ASN	0	−3.216	−2.847	<=B
A	557	LYS	21	−3.595	−5.597	
A	558	LYS	1	−0.981	−0.983	<=B
A	559	PHE	23	−1.702	−4.151	
A	560	LEU	1	−0.921	−0.930	<=B
A	561	PRO	0	−1.452	−1.285	<=B
A	562	PHE	0	−3.404	−3.013	<=B
A	563	GLN	13	−3.647	−4.722	

A	564	GLN	14	-8.358	-9.007	
A	565	PHE	16	-8.077	-8.988	
A	566	GLY	23	-5.601	-7.602	
A	567	ARG	6	-5.538	-5.591	
A	568	ASP	10	-4.293	-4.949	
A	569	ILE	0	-3.668	-3.246	<=B
A	570	ALA	3	-4.336	-4.182	
A	571	ASP	0	-4.258	-3.768	
A	572	THR	10	-6.275	-6.703	
A	573	THR	26	-7.638	-9.750	
A	574	ASP	11	-7.131	-7.576	
A	575	ALA	20	-7.597	-9.024	
A	576	VAL	28	-9.300	-11.450	
A	577	ARG	14	-8.117	-8.793	
A	578	ASP	21	-8.301	-9.762	
A	579	PRO	23	-9.849	-11.361	
A	580	GLN	15	-8.665	-9.393	
A	581	THR	11	-4.770	-5.486	
A	582	LEU	9	-4.075	-4.641	
A	583	GLU	12	-3.670	-4.628	
A	584	ILE	17	-5.130	-6.495	
A	585	LEU	34	-6.818	-9.944	
A	586	ASP	11	-7.936	-8.289	
A	587	ILE	25	-10.358	-12.042	
A	588	THR	17	-12.088	-12.653	
A	589	PRO	11	-13.190	-12.938	
A	590	CYS	26	-16.949	-17.989	
A	591	SER	19	-19.861	-19.762	
A	592	PHE	13	-21.848	-20.830	
A	593	GLY	23	-23.678	-23.600	
A	594	GLY	13	-24.334	-23.030	
A	595	VAL	29	-27.248	-27.449	
A	596	SER	24	-25.692	-25.497	
A	597	VAL	32	-27.996	-28.457	
A	598	ILE	33	-26.071	-26.868	
A	599	THR	28	-23.039	-23.610	
A	600	PRO	18	-16.514	-16.685	
A	601	GLY	7	-16.953	-15.808	
A	602	THR	17	-16.500	-16.558	
A	603	ASN	6	-12.805	-12.023	
A	604	THR	19	-10.902	-11.833	
A	605	SER	24	-15.067	-16.095	
A	606	ASN	11	-18.025	-17.218	
A	607	GLN	21	-20.220	-20.309	
A	608	VAL	33	-24.689	-25.645	
A	609	ALA	37	-26.486	-27.695	
A	610	VAL	32	-28.607	-28.997	
A	611	LEU	31	-27.889	-28.247	
A	612	TYR	26	-27.898	-27.680	
A	613	GLN	16	-24.931	-23.904	

A	614	GLY	11	−22.414	−21.101
A	615	VAL	28	−22.381	−23.027
A	616	ASN	4	−20.950	−19.001
A	617	CYS	18	−22.708	−22.167
A	618	THR	2	−18.761	−16.834
A	619	GLU	26	−20.550	−21.177
A	620	VAL	33	−23.954	−24.995
A	621	PRO	10	−18.940	−17.912
A	622	VAL	23	−19.058	−19.511
A	623	ALA	31	−19.958	−21.228
A	624	ILE	11	−16.852	−16.179
A	625	HIS	7	−13.926	−13.129
A	626	ALA	26	−14.875	−16.154
A	627	ASP	6	−11.640	−10.991
A	628	GLN	14	−16.108	−15.866
A	629	LEU	17	−20.082	−19.727
A	630	THR	26	−22.543	−22.940
A	631	PRO	17	−22.920	−22.239
A	632	THR	32	−23.743	−24.692
A	633	TRP	29	−25.282	−25.710
A	634	ARG	12	−20.464	−19.491
A	635	VAL	17	−19.616	−19.315
A	636	TYR	38	−23.245	−24.941
A	637	SER	16	−19.112	−18.754
A	638	THR	10	−15.068	−14.485
A	639	GLY	15	−17.389	−17.114
A	640	SER	2	−14.335	−12.916
A	641	ASN	20	−16.574	−16.968
A	642	VAL	20	−20.813	−20.719
A	643	PHE	28	−20.975	−21.783
A	644	GLN	8	−20.585	−19.138
A	645	THR	32	−21.337	−22.563
A	646	ARG	9	−19.262	−18.082
A	647	ALA	25	−20.669	−21.167
A	648	GLY	27	−23.362	−23.781
A	649	CYS	29	−24.221	−24.771
A	650	LEU	30	−26.751	−27.124
A	651	ILE	31	−25.691	−26.302
A	652	GLY	27	−23.306	−23.730
A	653	ALA	38	−20.668	−22.661
A	654	GLU	15	−15.713	−15.631
A	655	HIS	17	−15.326	−15.518
A	656	VAL	27	−12.892	−14.514
A	657	ASN	2	−9.349	−8.504
A	658	ASN	13	−8.018	−8.591
A	659	SER	9	−9.910	−9.806
A	660	TYR	20	−10.316	−11.430
A	661	GLU	2	−11.238	−10.175
A	662	CYS	14	−14.336	−14.297
A	663	ASP	21	−15.673	−16.285

A	664	ILE	29	-19.137	-20.271	
A	665	PRO	3	-18.446	-16.670	
A	666	ILE	41	-20.660	-22.999	
A	667	GLY	22	-19.069	-19.406	
A	668	ALA	12	-17.286	-16.678	
A	669	GLY	10	-16.383	-15.649	
A	670	ILE	29	-18.557	-19.758	
A	671	CYS	17	-18.878	-18.662	
A	672	ALA	37	-19.442	-21.462	
A	673	SER	17	-16.627	-16.670	
A	674	TYR	22	-13.484	-14.463	
A	675	GLN	21	-9.720	-11.017	
A	676	THR	10	-4.932	-5.514	
A	677	GLN	15	-5.685	-6.757	
A	678	THR	14	-4.518	-5.609	
A	679	ASN	7	-1.393	-2.038	<=B
A	680	SER	15	0.836	-0.985	<=B
A	681	ARG	2	2.967	2.396	<=B
A	682	ARG	1	2.555	2.146	<=B
A	683	ARG	0	2.719	2.406	<=B
A	684	ALA	5	2.308	1.468	<=B
A	685	ARG	13	2.368	0.601	<=B
A	686	SER	1	1.706	1.395	<=B
A	687	VAL	6	-1.570	-2.080	<=B
A	688	ALA	1	-2.624	-2.437	<=B
A	689	SER	11	-3.495	-4.358	
A	690	GLN	16	-6.550	-7.636	
A	691	SER	21	-11.318	-12.432	
A	692	ILE	37	-16.829	-19.148	
A	693	ILE	21	-15.802	-16.400	
A	694	ALA	29	-18.005	-19.270	
A	695	TYR	21	-15.866	-16.456	
A	696	THR	7	-14.881	-13.974	
A	697	MET	16	-13.808	-14.060	
A	698	SER	10	-10.088	-10.078	
A	699	LEU	4	-8.930	-8.363	
A	700	GLY	3	-7.494	-6.977	
A	701	ALA	2	-5.897	-5.449	
A	702	GLU	5	-4.774	-4.800	
A	703	ASN	5	-2.292	-2.603	<=B
A	704	SER	1	-1.677	-1.599	<=B
A	705	VAL	8	-2.892	-3.479	<=B
A	706	ALA	10	-3.942	-4.639	
A	707	TYR	3	-4.147	-4.015	
A	708	SER	12	-5.491	-6.240	
A	709	ASN	5	-6.058	-5.936	
A	710	ASN	14	-7.056	-7.855	
A	711	SER	8	-6.216	-6.421	
A	712	ILE	23	-7.656	-9.420	
A	713	ALA	12	-3.486	-4.465	

A	714	ILE	26	-3.394	-5.994	
A	715	PRO	18	-3.957	-5.572	
A	716	THR	8	-2.986	-3.562	<=B
A	717	ASN	6	-4.031	-4.257	
A	718	PHE	36	-8.325	-11.507	
A	719	THR	13	-9.017	-9.475	
A	720	ILE	30	-12.787	-14.766	
A	721	SER	18	-18.057	-18.051	
A	722	VAL	31	-23.905	-24.721	
A	723	THR	19	-25.266	-24.545	
A	724	THR	31	-26.845	-27.323	
A	725	GLU	28	-27.168	-27.264	
A	726	ILE	22	-26.016	-25.554	
A	727	LEU	31	-26.680	-27.177	
A	728	PRO	24	-26.536	-26.244	
A	729	VAL	33	-26.548	-27.290	
A	730	SER	33	-25.298	-26.184	
A	731	MET	33	-22.558	-23.759	
A	732	THR	31	-24.466	-25.218	
A	733	LYS	21	-24.389	-23.999	
A	734	THR	34	-24.930	-25.973	
A	735	SER	15	-25.599	-24.380	
A	736	VAL	40	-28.304	-29.649	
A	737	ASP	18	-27.554	-26.455	
A	738	CYS	25	-28.809	-28.371	
A	739	THR	14	-28.028	-26.414	
A	740	MET	13	-28.263	-26.508	
A	741	TYR	33	-30.446	-30.740	
A	742	ILE	34	-29.234	-29.783	
A	743	CYS	22	-27.981	-27.293	
A	744	GLY	23	-26.690	-26.266	
A	745	ASP	6	-21.693	-19.889	
A	746	SER	28	-19.407	-20.395	
A	747	THR	3	-17.054	-15.438	
A	748	GLU	21	-17.552	-17.948	
A	749	CYS	29	-21.249	-22.140	
A	750	SER	9	-21.155	-19.758	
A	751	ASN	9	-17.046	-16.121	
A	752	LEU	28	-19.559	-20.530	
A	753	LEU	27	-22.279	-22.822	
A	754	LEU	7	-19.213	-17.809	
A	755	GLN	13	-16.366	-15.979	
A	756	TYR	27	-18.280	-19.283	
A	757	GLY	0	-16.196	-14.334	
A	758	SER	3	-16.038	-14.539	
A	759	PHE	26	-21.519	-22.034	
A	760	CYS	24	-24.356	-24.315	
A	761	THR	5	-20.006	-18.280	
A	762	GLN	13	-18.239	-17.637	
A	763	LEU	29	-22.856	-23.563	

A	764	ASN	15	-22.655	-21.775	
A	765	ARG	5	-17.806	-16.333	
A	766	ALA	22	-17.110	-17.673	
A	767	LEU	27	-21.934	-22.517	
A	768	THR	8	-18.875	-17.624	
A	769	GLY	16	-16.475	-16.420	
A	770	ILE	28	-18.998	-20.034	
A	771	ALA	18	-21.631	-21.213	
A	772	VAL	6	-17.055	-15.784	
A	773	GLU	19	-16.403	-16.702	
A	774	GLN	33	-19.227	-20.811	
A	775	ASP	17	-17.600	-17.531	
A	776	LYS	14	-15.517	-15.342	
A	777	ASN	31	-21.617	-22.696	
A	778	THR	27	-23.024	-23.481	
A	779	GLN	9	-20.574	-19.243	
A	780	GLU	21	-20.608	-20.653	
A	781	VAL	39	-25.672	-27.205	
A	782	PHE	34	-24.818	-25.874	
A	783	ALA	14	-19.905	-19.226	
A	784	GLN	33	-20.524	-21.959	
A	785	VAL	31	-17.290	-18.867	
A	786	LYS	4	-12.239	-11.292	
A	787	GLN	17	-12.245	-12.792	
A	788	ILE	11	-11.065	-11.057	
A	789	TYR	29	-13.066	-14.898	
A	790	LYS	5	-10.308	-9.698	
A	791	THR	31	-11.454	-13.702	
A	792	PRO	17	-4.766	-6.173	
A	793	PRO	0	-1.748	-1.547	<=B
A	794	ILE	3	-1.830	-1.965	<=B
A	795	LYS	13	-6.072	-6.868	
A	796	ASP	6	-6.680	-6.602	
A	797	PHE	26	-10.278	-12.086	
A	798	GLY	21	-9.278	-10.626	
A	799	GLY	17	-7.593	-8.675	
A	800	PHE	32	-13.694	-15.799	
A	801	ASN	17	-13.160	-13.602	
A	802	PHE	32	-16.769	-18.521	
A	803	SER	13	-10.990	-11.221	
A	804	GLN	25	-13.707	-15.006	
A	805	ILE	39	-20.287	-22.439	
A	806	LEU	21	-16.493	-17.011	
A	807	PRO	28	-11.995	-13.835	
A	808	ASP	14	-6.001	-6.921	
A	809	PRO	5	-1.449	-1.857	<=B
A	810	SER	4	0.940	0.372	<=B
A	811	LYS	20	-2.126	-4.181	
A	812	PRO	0	-1.497	-1.324	<=B
A	813	SER	21	-6.034	-7.755	

A	814	LYS	15	−6.885	−7.818
A	815	ARG	23	−13.544	−14.631
A	816	SER	34	−17.257	−19.183
A	817	PHE	14	−14.537	−14.475
A	818	ILE	35	−20.894	−22.516
A	819	GLU	33	−20.832	−22.231
A	820	ASP	15	−15.002	−15.002
A	821	LEU	26	−17.063	−18.091
A	822	LEU	35	−21.128	−22.723
A	823	PHE	21	−17.069	−17.521
A	824	ASN	14	−13.993	−13.994
A	825	LYS	29	−14.714	−16.357
A	826	VAL	38	−16.339	−18.830
A	827	THR	5	−18.636	−17.068
A	828	LEU	23	−22.020	−22.132
A	829	ALA	25	−22.614	−22.888
A	830	ASP	28	−21.155	−21.942
A	831	ALA	14	−20.301	−19.576
A	832	GLY	23	−17.229	−17.893
A	833	PHE	9	−13.418	−12.910
A	834	ILE	3	−13.911	−12.656
A	835	LYS	24	−13.680	−14.867
A	836	GLN	3	−9.798	−9.017
A	837	TYR	1	−11.408	−10.211
A	838	GLY	1	−8.355	−7.509
A	839	ASP	8	−10.926	−10.590
A	840	CYS	16	−15.836	−15.854
A	841	LEU	4	−12.380	−11.417
A	842	GLY	5	−8.006	−7.660
A	843	ASP	2	−8.836	−8.049
A	844	ILE	11	−12.836	−12.625
A	845	ALA	10	−15.447	−14.821
A	846	ALA	13	−15.488	−15.202
A	847	ARG	11	−17.377	−16.644
A	848	ASP	19	−18.335	−18.412
A	849	LEU	18	−21.510	−21.106
A	850	ILE	24	−22.632	−22.790
A	851	CYS	15	−20.950	−20.265
A	852	ALA	23	−24.604	−24.420
A	853	GLN	28	−26.547	−26.715
A	854	LYS	23	−26.161	−25.797
A	855	PHE	17	−26.282	−25.215
A	856	ASN	25	−29.069	−28.601
A	857	GLY	26	−28.906	−28.572
A	858	LEU	30	−29.672	−29.710
A	859	THR	18	−27.067	−26.024
A	860	VAL	29	−23.223	−23.887
A	861	LEU	19	−22.970	−22.514
A	862	PRO	11	−18.409	−17.557
A	863	PRO	28	−17.496	−18.704

A	864	LEU	18	−13.261	−13.806
A	865	LEU	29	−15.207	−16.793
A	866	THR	8	−12.962	−12.391
A	867	ASP	24	−15.975	−16.898
A	868	GLU	8	−11.951	−11.497
A	869	MET	14	−14.386	−14.341
A	870	ILE	31	−20.824	−21.995
A	871	ALA	22	−18.858	−19.219
A	872	GLN	11	−15.700	−15.159
A	873	TYR	27	−20.505	−21.252
A	874	THR	39	−23.406	−25.200
A	875	SER	23	−19.079	−19.530
A	876	ALA	22	−18.252	−18.683
A	877	LEU	36	−24.398	−25.733
A	878	LEU	32	−23.728	−24.679
A	879	ALA	25	−19.933	−20.516
A	880	GLY	35	−22.106	−23.589
A	881	THR	32	−23.773	−24.719
A	882	ILE	29	−20.370	−21.363
A	883	THR	19	−16.346	−16.651
A	884	SER	27	−16.809	−17.981
A	885	GLY	17	−20.532	−20.126
A	886	TRP	22	−21.516	−21.571
A	887	THR	16	−16.518	−16.459
A	888	PHE	31	−17.684	−19.216
A	889	GLY	25	−19.559	−20.185
A	890	ALA	13	−14.085	−13.960
A	891	GLY	4	−11.116	−10.298
A	892	ALA	2	−11.769	−10.645
A	893	ALA	22	−13.770	−14.716
A	894	LEU	11	−11.755	−11.668
A	895	GLN	10	−11.136	−11.005
A	896	ILE	19	−11.087	−11.997
A	897	PRO	11	−11.384	−11.340
A	898	PHE	26	−14.561	−15.876
A	899	ALA	19	−13.005	−13.695
A	900	MET	9	−11.241	−10.983
A	901	GLN	31	−13.885	−15.854
A	902	MET	28	−14.546	−16.093
A	903	ALA	15	−10.722	−11.214
A	904	TYR	17	−11.031	−11.717
A	905	ARG	38	−14.972	−17.620
A	906	PHE	27	−10.973	−12.816
A	907	ASN	10	−8.799	−8.937
A	908	GLY	30	−11.057	−13.236
A	909	ILE	33	−9.648	−12.334
A	910	GLY	21	−6.678	−8.325
A	911	VAL	36	−7.616	−10.880
A	912	THR	19	−3.710	−5.468
A	913	GLN	11	−5.352	−6.001

A	914	ASN	7	−1.210	−1.876	<=B
A	915	VAL	29	−3.237	−6.200	
A	916	LEU	26	−7.392	−9.532	
A	917	TYR	9	−2.629	−3.361	<=B
A	918	GLU	11	−2.037	−3.068	<=B
A	919	ASN	23	−2.778	−5.103	
A	920	GLN	19	−5.070	−6.672	
A	921	LYS	1	−4.483	−4.082	
A	922	LEU	14	−4.175	−5.305	
A	923	ILE	28	−8.946	−11.137	
A	924	ALA	20	−10.803	−11.861	
A	925	ASN	7	−7.565	−7.500	
A	926	GLN	23	−11.130	−12.495	
A	927	PHE	30	−15.064	−16.782	
A	928	ASN	12	−14.170	−13.920	
A	929	SER	11	−12.961	−12.736	
A	930	ALA	28	−17.504	−18.711	
A	931	ILE	25	−19.114	−19.791	
A	932	GLY	10	−15.614	−14.969	
A	933	LYS	14	−14.933	−14.825	
A	934	ILE	35	−19.427	−21.218	
A	935	GLN	14	−15.575	−15.394	
A	936	ASP	8	−11.800	−11.363	
A	937	SER	18	−13.974	−14.437	
A	938	LEU	30	−15.229	−16.928	
A	939	SER	8	−10.129	−9.884	
A	940	SER	6	−8.501	−8.213	
A	941	THR	10	−10.342	−10.303	
A	942	ALA	3	−10.769	−9.875	
A	943	SER	3	−14.964	−13.588	
A	944	ALA	27	−19.420	−20.292	
A	945	LEU	33	−20.516	−21.952	
A	946	GLY	7	−18.268	−16.972	
A	947	LYS	21	−19.441	−19.620	
A	948	LEU	32	−23.890	−24.823	
A	949	GLN	12	−19.210	−18.381	
A	950	ASP	15	−20.543	−19.906	
A	951	VAL	35	−21.740	−23.265	
A	952	VAL	22	−23.924	−23.703	
A	953	ASN	10	−21.885	−20.518	
A	954	GLN	23	−20.138	−20.467	
A	955	ASN	36	−24.591	−25.903	
A	956	ALA	17	−24.192	−23.365	
A	957	GLN	11	−23.767	−22.299	
A	958	ALA	29	−24.356	−24.890	
A	959	LEU	30	−26.579	−26.972	
A	960	ASN	15	−26.570	−25.240	
A	961	THR	20	−26.005	−25.314	
A	962	LEU	38	−29.461	−30.443	
A	963	VAL	20	−29.399	−28.318	

A	964	LYS	12	−26.666	−24.980
A	965	GLN	27	−25.885	−26.013
A	966	LEU	28	−27.819	−27.840
A	967	SER	11	−23.644	−22.190
A	968	SER	21	−21.130	−21.115
A	969	ASN	4	−16.895	−15.412
A	970	PHE	23	−15.854	−16.676
A	971	GLY	7	−10.999	−10.539
A	972	ALA	30	−13.738	−15.609
A	973	ILE	13	−10.334	−10.641
A	974	SER	12	−13.114	−12.986
A	975	SER	10	−20.066	−18.908
A	976	VAL	4	−20.895	−18.952
A	977	LEU	24	−21.822	−22.073
A	978	ASN	4	−18.255	−16.616
A	979	ASP	11	−12.153	−12.020
A	980	ILE	31	−14.992	−16.833
A	981	LEU	17	−13.666	−14.049
A	982	SER	7	−10.262	−9.887
A	983	ARG	12	−9.371	−9.673
A	984	LEU	20	−10.712	−11.780
A	985	ASP	1	−9.818	−8.804
A	986	LYS	2	−10.234	−9.287
A	987	VAL	0	−10.341	−9.152
A	988	GLU	10	−11.237	−11.095
A	989	ALA	20	−14.580	−15.203
A	990	GLU	7	−15.372	−14.409
A	991	VAL	6	−14.581	−13.595
A	992	GLN	22	−15.842	−16.550
A	993	ILE	31	−19.848	−21.131
A	994	ASP	10	−19.286	−18.218
A	995	ARG	18	−18.297	−18.263
A	996	LEU	35	−21.529	−23.078
A	997	ILE	23	−23.304	−23.269
A	998	THR	10	−20.748	−19.512
A	999	GLY	22	−20.862	−20.993
A	1000	ARG	34	−24.739	−25.804
A	1001	LEU	21	−25.462	−24.949
A	1002	GLN	9	−21.021	−19.639
A	1003	SER	32	−23.431	−24.416
A	1004	LEU	32	−25.917	−26.617
A	1005	GLN	10	−21.707	−20.360
A	1006	THR	19	−19.972	−19.860
A	1007	TYR	39	−22.990	−24.831
A	1008	VAL	25	−22.328	−22.636
A	1009	THR	7	−15.213	−14.268
A	1010	GLN	19	−14.910	−15.380
A	1011	GLN	39	−21.424	−23.446
A	1012	LEU	14	−16.247	−15.988
A	1013	ILE	8	−13.266	−12.660

A	1014	ARG	28	−17.485	−18.694
A	1015	ALA	22	−19.193	−19.516
A	1016	ALA	6	−15.804	−14.676
A	1017	GLU	18	−16.522	−16.692
A	1018	ILE	35	−20.519	−22.184
A	1019	ARG	13	−20.423	−19.569
A	1020	ALA	8	−17.188	−16.132
A	1021	SER	24	−22.160	−22.372
A	1022	ALA	27	−22.884	−23.358
A	1023	ASN	7	−19.080	−17.691
A	1024	LEU	21	−20.428	−20.494
A	1025	ALA	35	−25.563	−26.648
A	1026	ALA	19	−23.944	−23.375
A	1027	THR	13	−21.788	−20.777
A	1028	LYS	35	−26.242	−27.249
A	1029	MET	34	−29.219	−29.769
A	1030	SER	12	−22.683	−21.454
A	1031	GLU	16	−23.307	−22.466
A	1032	CYS	38	−28.342	−29.453
A	1033	VAL	33	−28.400	−28.929
A	1034	LEU	25	−26.041	−25.922
A	1035	GLY	15	−23.949	−22.920
A	1036	GLN	24	−22.695	−22.845
A	1037	SER	25	−21.470	−21.876
A	1038	LYS	9	−13.207	−12.723
A	1039	ARG	16	−13.011	−13.355
A	1040	VAL	1	−12.529	−11.203
A	1041	ASP	1	−16.176	−14.430
A	1042	PHE	21	−19.186	−19.394
A	1043	CYS	33	−26.035	−26.836
A	1044	GLY	28	−24.174	−24.614
A	1045	LYS	2	−19.279	−17.292
A	1046	GLY	26	−14.603	−15.914
A	1047	TYR	21	−13.050	−13.964
A	1048	HIS	27	−19.863	−20.684
A	1049	LEU	36	−20.399	−22.193
A	1050	MET	34	−26.752	−27.586
A	1051	SER	37	−28.815	−29.757
A	1052	PHE	35	−28.486	−29.235
A	1053	PRO	42	−28.580	−30.123
A	1054	GLN	36	−24.902	−26.179
A	1055	SER	30	−25.721	−26.213
A	1056	ALA	33	−24.595	−25.562
A	1057	PRO	25	−24.000	−24.115
A	1058	HIS	38	−26.393	−27.728
A	1059	GLY	32	−26.560	−27.186
A	1060	VAL	44	−28.030	−29.867
A	1061	VAL	35	−27.084	−27.994
A	1062	PHE	36	−30.638	−31.255
A	1063	LEU	36	−29.062	−29.859

A	1064	HIS	28	−28.768	−28.680	
A	1065	VAL	36	−25.691	−26.877	
A	1066	THR	21	−20.588	−20.635	
A	1067	TYR	33	−13.292	−15.558	
A	1068	VAL	17	−10.871	−11.576	
A	1069	PRO	17	−8.167	−9.183	
A	1070	ALA	11	−6.205	−6.757	
A	1071	HIS	5	−3.288	−3.485	<=B
A	1072	GLU	15	−3.160	−4.522	
A	1073	LYS	16	−2.991	−4.487	
A	1074	ASN	9	−3.073	−3.755	
A	1075	PHE	30	−5.519	−8.334	
A	1076	THR	12	−6.592	−7.214	
A	1077	THR	25	−8.165	−10.101	
A	1078	ALA	27	−9.351	−11.381	
A	1079	PRO	12	−9.880	−10.124	
A	1080	ALA	20	−10.240	−11.363	
A	1081	ILE	29	−9.355	−11.614	
A	1082	CYS	13	−9.349	−9.769	
A	1083	HIS	23	−7.681	−9.443	
A	1084	ASP	13	−7.507	−8.138	
A	1085	GLY	0	−8.140	−7.204	
A	1086	LYS	13	−8.549	−9.061	
A	1087	ALA	15	−9.280	−9.938	
A	1088	HIS	29	−8.760	−11.088	
A	1089	PHE	13	−8.559	−9.070	
A	1090	PRO	19	−5.940	−7.442	
A	1091	ARG	11	−5.583	−6.206	
A	1092	GLU	16	−4.249	−5.600	
A	1093	GLY	31	−5.647	−8.562	
A	1094	VAL	22	−7.525	−9.189	
A	1095	PHE	33	−8.248	−11.095	
A	1096	VAL	24	−7.265	−9.189	
A	1097	SER	18	−6.226	−7.580	
A	1098	ASN	12	−3.613	−4.578	
A	1099	GLY	2	−4.125	−3.881	
A	1100	THR	0	−3.902	−3.454	<=B
A	1101	HIS	9	−2.984	−3.676	<=B
A	1102	TRP	26	−5.476	−7.836	
A	1103	PHE	18	−4.888	−6.396	
A	1104	VAL	24	−6.156	−8.208	
A	1105	THR	26	−5.644	−7.985	
A	1106	GLN	18	−3.840	−5.469	
A	1107	ARG	13	−5.603	−6.454	
A	1108	ASN	23	−4.792	−6.886	
A	1109	PHE	22	−4.471	−6.487	
A	1110	TYR	21	−3.513	−5.524	
A	1111	GLU	20	−1.603	−3.719	
A	1112	PRO	20	−2.888	−4.856	
A	1113	GLN	23	−2.218	−4.608	

A	1114	ILE	7	-3.321	-3.744	
A	1115	ILE	31	-5.127	-8.103	
A	1116	THR	10	-5.183	-5.737	
A	1117	THR	8	-4.713	-5.091	
A	1118	ASP	8	-3.114	-3.676	<=B
A	1119	ASN	26	-5.414	-7.782	
A	1120	THR	32	-6.384	-9.330	
A	1121	PHE	4	-7.128	-6.768	
A	1122	VAL	15	-7.817	-8.643	
A	1123	SER	8	-8.303	-8.268	
A	1124	GLY	9	-8.749	-8.778	
A	1125	ASN	3	-8.641	-7.992	
A	1126	CYS	12	-10.655	-10.810	
A	1127	ASP	0	-9.604	-8.499	
A	1128	VAL	8	-9.391	-9.231	
A	1129	VAL	23	-10.704	-12.118	
A	1130	ILE	2	-10.129	-9.194	
A	1131	GLY	10	-10.190	-10.168	
A	1132	ILE	23	-10.568	-11.998	
A	1133	VAL	21	-9.504	-10.826	
A	1134	ASN	2	-8.067	-7.369	
A	1135	ASN	33	-6.900	-9.901	
A	1136	THR	4	-6.331	-6.063	
A	1137	VAL	25	-6.854	-8.941	
A	1138	TYR	14	-3.957	-5.112	
A	1139	ASP	11	-3.140	-4.044	
A	1140	PRO	8	-1.028	-1.830	<=B
A	1141	LEU	3	-0.668	-0.936	<=B
A	1142	GLN	7	-0.240	-1.017	<=B
A	1143	PRO	6	0.809	0.026	<=B
A	1144	GLU	5	0.682	0.029	<=B
A	1145	LEU	5	0.971	0.285	<=B
A	1146	ASP	6	1.983	1.065	<=B
A	1147	SER	5	1.068	0.370	<=B
A	1148	PHE	6	1.136	0.316	<=B
A	1149	LYS	6	1.733	0.844	<=B
A	1150	GLU	5	2.624	1.747	<=B
A	1151	GLU	6	2.405	1.438	<=B
A	1152	LEU	7	2.171	1.116	<=B
A	1153	ASP	6	2.853	1.835	<=B
A	1154	LYS	5	2.858	1.954	<=B
A	1155	TYR	5	2.675	1.792	<=B
A	1156	PHE	6	3.001	1.966	<=B
A	1157	LYS	6	3.277	2.210	<=B
A	1158	ASN	6	3.172	2.117	<=B
A	1159	HIS	7	2.975	1.828	<=B
A	1160	THR	5	3.208	2.264	<=B
A	1161	SER	5	3.113	2.180	<=B
A	1162	PRO	4	3.211	2.382	<=B

Identified 109 B-Cell epitope residues out of 1149 total residues