A	14	GLN	10	−15.544	−14.907
A	15	CYS	11	−16.495	−15.863
A	16	VAL	18	−13.195	−13.748
A	17	ASN	2	−11.220	−10.160
A	18	LEU	37	−11.616	−14.535
A	19	ARG	6	−7.891	−7.674
A	20	THR	21	−6.996	−8.606
A	21	ARG	25	−6.849	−8.936
A	22	THR	16	−6.307	−7.422
A	23	GLN	0	−4.408	−3.901
A	24	LEU	20	−4.527	−6.307
A	25	PRO	2	−4.690	−4.381
A	26	PRO	8	−8.096	−8.085
A	27	ALA	19	−9.009	−10.158
A	28	TYR	9	−10.215	−10.076
A	29	THR	21	−12.347	−13.342
A	30	ASN	9	−14.186	−13.590
A	31	SER	31	−15.649	−17.415
A	32	PHE	14	−16.410	−16.133
A	33	THR	17	−17.589	−17.522
A	34	ARG	34	−17.443	−19.347
A	35	GLY	40	−20.015	−22.313
A	36	VAL	30	−19.708	−20.891
A	37	TYR	35	−16.265	−18.420
A	38	TYR	21	−14.329	−15.096
A	39	PRO	25	−14.481	−15.691
A	40	ASP	12	−11.012	−11.125
A	41	LYS	7	−6.709	−6.743
A	42	VAL	9	−12.034	−11.685
A	43	PHE	5	−10.921	−10.240
A	44	ARG	23	−14.427	−15.413
A	45	SER	12	−14.319	−14.052
A	46	SER	11	−15.753	−15.207
A	47	VAL	18	−19.129	−18.999
A	48	LEU	19	−19.830	−19.735
A	49	HIS	26	−19.399	−20.158
A	50	SER	16	−19.156	−18.793
A	51	THR	22	−17.424	−17.950
A	52	GLN	7	−14.995	−14.076
A	53	ASP	23	−14.225	−15.234
A	54	LEU	20	−16.614	−17.003
A	55	PHE	34	−19.630	−21.282
A	56	LEU	34	−18.788	−20.537
A	57	PRO	22	−20.539	−20.707
A	58	PHE	26	−20.737	−21.342
A	59	PHE	12	−19.118	−18.299
A	60	SER	26	−16.870	−17.920
A	61	ASN	5	−14.626	−13.519
A	62	VAL	37	−15.445	−17.924
A	63	THR	21	−13.548	−14.405

A	64	TRP	21	−13.651	−14.497	
A	65	PHE	24	−15.452	−16.435	
A	66	HIS	21	−12.703	−13.658	
A	67	ALA	32	−13.053	−15.232	
A	68	ILE	15	−7.941	−8.753	
A	69	HIS	28	−4.722	−7.399	
A	70	VAL	12	−2.565	−3.650	<=B
A	71	SER	7	−2.027	−2.599	<=B
A	72	GLY	1	−1.194	−1.171	<=B
A	73	THR	15	−0.750	−2.389	<=B
A	74	ASN	10	−0.886	−1.934	<=B
A	75	GLY	13	−2.204	−3.446	<=B
A	76	THR	32	−4.430	−7.601	
A	77	LYS	13	−7.030	−7.716	
A	78	ARG	16	−9.291	−10.063	
A	79	PHE	27	−13.677	−15.210	
A	80	ASP	20	−16.654	−17.039	
A	81	ASN	34	−20.475	−22.030	
A	82	PRO	20	−18.454	−18.632	
A	83	VAL	19	−20.241	−20.099	
A	84	LEU	27	−20.297	−21.068	
A	85	PRO	8	−13.939	−13.256	
A	86	PHE	29	−17.267	−18.616	
A	87	ASN	3	−12.388	−11.308	
A	88	ASP	11	−13.319	−13.053	
A	89	GLY	27	−19.848	−20.671	
A	90	VAL	25	−22.100	−22.433	
A	91	TYR	39	−21.609	−23.609	
A	92	PHE	32	−24.465	−25.331	
A	93	ALA	42	−20.331	−22.823	
A	94	SER	24	−18.322	−18.975	
A	95	THR	25	−13.783	−15.073	
A	96	GLU	26	−13.140	−14.619	
A	97	LYS	21	−6.198	−7.900	
A	98	SER	29	−5.997	−8.642	
A	99	ASN	21	−12.881	−13.815	
A	100	ILE	34	−16.884	−18.852	
A	101	ILE	30	−22.128	−23.033	
A	102	ARG	37	−23.775	−25.296	
A	103	GLY	33	−28.057	−28.625	
A	104	TRP	27	−29.760	−29.443	
A	105	ILE	32	−28.494	−28.898	
A	106	PHE	35	−26.048	−27.077	
A	107	GLY	31	−22.069	−23.096	
A	108	THR	11	−15.417	−14.909	
A	109	THR	14	−13.475	−13.536	
A	110	LEU	25	−18.379	−19.140	
A	111	ASP	5	−13.710	−12.708	
A	112	SER	16	−14.987	−15.103	
A	113	LYS	7	−9.883	−9.552	

A	114	THR	13	−11.977	−12.095	
A	115	GLN	17	−15.516	−15.687	
A	116	SER	33	−20.887	−22.280	
A	117	LEU	29	−23.567	−24.191	
A	118	LEU	37	−27.335	−28.446	
A	119	ILE	23	−28.010	−27.434	
A	120	VAL	28	−27.114	−27.216	
A	121	ASN	16	−23.594	−22.721	
A	122	ASN	24	−20.780	−21.150	
A	123	ALA	16	−13.846	−14.094	
A	124	THR	7	−11.444	−10.933	
A	125	ASN	12	−16.892	−16.329	
A	126	VAL	13	−21.686	−20.687	
A	127	VAL	17	−22.439	−21.813	
A	128	ILE	17	−22.831	−22.160	
A	129	LYS	21	−22.049	−21.928	
A	130	VAL	18	−20.490	−20.203	
A	131	CYS	21	−18.907	−19.148	
A	132	GLU	5	−15.943	−14.685	
A	133	PHE	32	−19.724	−21.135	
A	134	GLN	7	−17.689	−16.459	
A	135	PHE	34	−21.459	−22.901	
A	136	CYS	22	−18.918	−19.272	
A	137	ASN	6	−15.095	−14.049	
A	138	ASP	19	−18.280	−18.363	
A	139	PRO	28	−22.921	−23.505	
A	140	PHE	30	−23.916	−24.616	
A	141	LEU	29	−20.332	−21.328	
A	142	GLY	24	−14.157	−15.289	
A	143	VAL	28	−8.172	−10.452	
A	144	TYR	9	−4.949	−5.415	
A	145	TYR	23	−1.768	−4.210	
A	146	HIS	10	0.675	−0.553	<=B
A	147	LYS	15	0.869	−0.956	<=B
A	148	ASN	0	3.239	2.867	<=B
A	149	ASN	10	2.686	1.227	<=B
A	150	LYS	0	2.566	2.271	<=B
A	151	SER	8	1.355	0.279	<=B
A	152	TRP	23	−1.900	−4.327	
A	153	MET	6	−5.855	−5.871	
A	154	GLU	24	−9.222	−10.921	
A	155	SER	16	−8.927	−9.740	
A	156	GLU	31	−13.573	−15.577	
A	157	PHE	19	−18.776	−18.802	
A	158	ARG	22	−20.222	−20.426	
A	159	VAL	35	−25.588	−26.671	
A	160	TYR	31	−21.490	−22.584	
A	161	SER	11	−17.610	−16.850	
A	162	SER	10	−17.223	−16.392	
A	163	ALA	17	−18.022	−17.904	

A	164	ASN	14	−14.789	−14.698	
A	165	ASN	11	−12.640	−12.451	
A	166	CYS	16	−15.974	−15.977	
A	167	THR	14	−14.381	−14.337	
A	168	PHE	19	−15.638	−16.024	
A	169	GLU	8	−17.109	−16.062	
A	170	TYR	15	−16.637	−16.449	
A	171	VAL	9	−16.602	−15.728	
A	172	SER	18	−13.636	−14.138	
A	173	GLN	0	−9.662	−8.551	
A	174	PRO	1	−9.756	−8.749	
A	175	PHE	12	−6.063	−6.745	
A	176	LEU	7	−5.070	−5.292	
A	177	MET	20	−6.302	−7.878	
A	178	ASP	9	−4.978	−5.440	
A	179	LEU	30	−7.264	−9.878	
A	180	GLU	10	−3.119	−3.910	
A	181	GLY	19	−1.555	−3.561	<=B
A	182	LYS	16	−0.500	−2.282	<=B
A	183	GLN	14	−0.064	−1.667	<=B
A	184	GLY	1	−0.831	−0.851	<=B
A	185	ASN	9	−2.850	−3.558	<=B
A	186	PHE	30	−6.419	−9.130	
A	187	LYS	9	−5.873	−6.232	
A	188	ASN	23	−10.704	−12.118	
A	189	LEU	25	−13.740	−15.035	
A	190	ARG	17	−17.240	−17.212	
A	191	GLU	33	−20.187	−21.661	
A	192	PHE	26	−23.236	−23.554	
A	193	VAL	27	−21.313	−21.967	
A	194	PHE	34	−23.678	−24.865	
A	195	LYS	25	−20.843	−21.321	
A	196	ASN	22	−13.924	−14.853	
A	197	ILE	18	−11.293	−12.065	
A	198	ASP	1	−7.036	−6.342	
A	199	GLY	3	−10.782	−9.887	
A	200	TYR	10	−13.512	−13.109	
A	201	PHE	28	−15.999	−17.379	
A	202	LYS	22	−17.583	−18.091	
A	203	ILE	22	−19.525	−19.809	
A	204	TYR	27	−17.358	−18.467	
A	205	SER	20	−16.961	−17.310	
A	206	LYS	23	−14.803	−15.745	
A	207	HIS	7	−11.584	−11.057	
A	208	THR	18	−8.083	−9.223	
A	209	PRO	0	−4.752	−4.206	
A	210	ILE	27	−5.308	−7.802	
A	211	ASN	0	−3.506	−3.103	<=B
A	212	LEU	17	−5.282	−6.630	
A	213	VAL	1	−3.885	−3.554	<=B

A	214	ARG	6	-6.298	-6.264	
A	215	ASP	10	-9.924	-9.932	
A	216	LEU	32	-13.267	-15.421	
A	217	PRO	23	-10.031	-11.522	
A	218	GLN	1	-11.579	-10.362	
A	219	GLY	17	-12.983	-13.445	
A	220	PHE	21	-14.518	-15.263	
A	221	SER	20	-13.992	-14.683	
A	222	ALA	25	-15.620	-16.698	
A	223	LEU	28	-17.259	-18.494	
A	224	GLU	7	-11.903	-11.340	
A	225	PRO	14	-12.342	-12.533	
A	226	LEU	15	-12.060	-12.398	
A	227	VAL	11	-14.361	-13.974	
A	228	ASP	9	-12.323	-11.941	
A	229	LEU	31	-15.679	-17.441	
A	230	PRO	0	-11.658	-10.317	
A	231	ILE	32	-15.875	-17.730	
A	232	GLY	7	-13.158	-12.449	
A	233	ILE	39	-15.648	-18.334	
A	234	ASN	9	-14.412	-13.790	
A	235	ILE	33	-17.614	-19.383	
A	236	THR	7	-14.478	-13.618	
A	237	ARG	13	-19.771	-18.993	
A	238	PHE	35	-24.392	-25.612	
A	239	GLN	29	-26.014	-26.357	
A	240	THR	29	-27.584	-27.747	
A	241	LEU	29	-26.782	-27.037	
A	242	LEU	34	-23.502	-24.709	
A	243	ALA	29	-18.207	-19.448	
A	244	LEU	32	-14.097	-16.156	
A	245	HIS	33	-7.931	-10.814	
A	246	ARG	21	-4.468	-6.369	
A	247	SER	17	-1.175	-2.995	<=B
A	248	TYR	10	-0.256	-1.377	<=B
A	249	LEU	13	-1.228	-2.582	<=B
A	250	THR	11	-0.695	-1.880	<=B
A	251	PRO	0	0.866	0.767	<=B
A	252	GLY	2	-1.400	-1.469	<=B
A	253	ASP	17	-3.243	-4.825	
A	254	SER	3	-4.160	-4.027	
A	255	SER	11	-6.339	-6.875	
A	256	SER	11	-6.577	-7.086	
A	257	GLY	10	-4.865	-5.456	
A	258	TRP	29	-5.047	-7.801	
A	259	THR	23	-5.330	-7.362	
A	260	ALA	29	-10.793	-12.887	
A	261	GLY	33	-9.295	-12.021	
A	262	ALA	20	-7.929	-9.318	
A	263	ALA	32	-10.866	-13.297	

A	264	ALA	25	−14.253	−15.488
A	265	TYR	34	−18.715	−20.473
A	266	TYR	32	−17.581	−19.239
A	267	VAL	26	−21.139	−21.698
A	268	GLY	31	−20.349	−21.574
A	269	TYR	14	−18.195	−17.713
A	270	LEU	31	−18.356	−19.810
A	271	GLN	22	−14.531	−15.390
A	272	PRO	7	−13.808	−13.025
A	273	ARG	32	−16.308	−18.113
A	274	THR	19	−18.116	−18.218
A	275	PHE	27	−19.604	−20.454
A	276	LEU	21	−19.434	−19.614
A	277	LEU	32	−17.748	−19.387
A	278	LYS	18	−17.005	−17.120
A	279	TYR	21	−16.299	−16.839
A	280	ASN	8	−12.030	−11.567
A	281	GLU	3	−10.003	−9.197
A	282	ASN	5	−7.349	−7.079
A	283	GLY	10	−11.375	−11.217
A	284	THR	8	−12.280	−11.788
A	285	ILE	29	−15.119	−16.715
A	286	THR	14	−13.893	−13.905
A	287	ASP	13	−15.620	−15.318
A	288	ALA	32	−18.267	−19.846
A	289	VAL	26	−19.213	−19.994
A	290	ASP	24	−21.173	−21.498
A	291	CYS	25	−22.287	−22.599
A	292	ALA	23	−25.016	−24.785
A	293	LEU	28	−24.000	−24.460
A	294	ASP	21	−24.890	−24.443
A	295	PRO	32	−26.296	−26.952
A	296	LEU	22	−26.167	−25.688
A	297	SER	23	−23.418	−23.370
A	298	GLU	26	−24.449	−24.628
A	299	THR	26	−23.859	−24.105
A	300	LYS	30	−18.483	−19.807
A	301	CYS	23	−20.970	−21.203
A	302	THR	23	−19.221	−19.655
A	303	LEU	23	−17.869	−18.459
A	304	LYS	12	−18.943	−18.144
A	305	SER	12	−19.476	−18.616
A	306	PHE	15	−17.347	−17.077
A	307	THR	5	−15.666	−14.440
A	308	VAL	29	−19.719	−20.786
A	309	GLU	6	−18.628	−17.176
A	310	LYS	17	−19.033	−18.799
A	311	GLY	11	−20.549	−19.451
A	312	ILE	29	−23.523	−24.152
A	313	TYR	27	−23.206	−23.642

A	314	GLN	8	−22.653	−20.968
A	315	THR	32	−23.305	−24.305
A	316	SER	20	−23.832	−23.391
A	317	ASN	9	−21.175	−19.775
A	318	PHE	34	−23.545	−24.748
A	319	ARG	13	−19.872	−19.081
A	320	VAL	29	−19.551	−20.638
A	321	GLN	12	−14.972	−14.630
A	322	PRO	17	−12.739	−13.229
A	323	THR	16	−10.525	−11.155
A	324	GLU	12	−10.410	−10.593
A	325	SER	7	−12.532	−11.896
A	326	ILE	27	−12.741	−14.381
A	327	VAL	17	−14.693	−14.958
A	328	ARG	31	−13.560	−15.565
A	329	PHE	26	−13.681	−15.098
A	330	PRO	21	−12.120	−13.141
A	331	ASN	4	−11.949	−11.035
A	332	ILE	25	−14.227	−15.466
A	333	THR	1	−12.134	−10.853
A	334	ASN	10	−14.185	−13.703
A	335	LEU	12	−20.836	−19.820
A	336	CYS	33	−25.132	−26.037
A	337	PRO	16	−24.683	−23.685
A	338	PHE	18	−27.363	−26.286
A	339	GLY	5	−20.442	−18.666
A	340	GLU	15	−20.022	−19.444
A	341	VAL	29	−24.048	−24.618
A	342	PHE	24	−21.679	−21.946
A	343	ASN	8	−15.719	−14.831
A	344	ALA	21	−12.727	−13.678
A	345	THR	1	−7.352	−6.621
A	346	ARG	14	−7.519	−8.264
A	347	PHE	38	−11.355	−14.419
A	348	ALA	23	−8.865	−10.491
A	349	SER	24	−4.786	−6.995
A	350	VAL	37	−7.368	−10.776
A	351	TYR	19	−4.931	−6.549
A	352	ALA	12	−5.305	−6.075
A	353	TRP	33	−8.730	−11.521
A	354	ASN	21	−12.216	−13.226
A	355	ARG	17	−19.233	−18.976
A	356	LYS	21	−22.428	−22.264
A	357	ARG	7	−22.636	−20.838
A	358	ILE	34	−25.953	−26.878
A	359	SER	11	−22.239	−20.946
A	360	ASN	0	−17.989	−15.920
A	361	CYS	20	−20.803	−20.710
A	362	VAL	12	−22.544	−21.332
A	363	ALA	31	−26.577	−27.085

A	364	ASP	14	−24.768	−23.529
A	365	TYR	30	−27.752	−28.011
A	366	SER	9	−22.299	−20.769
A	367	VAL	13	−21.671	−20.674
A	368	LEU	35	−25.130	−26.265
A	369	TYR	16	−23.311	−22.470
A	370	ASN	5	−19.127	−17.503
A	371	SER	18	−18.204	−18.181
A	372	ALA	0	−12.768	−11.300
A	373	SER	19	−12.957	−13.652
A	374	PHE	24	−17.152	−17.940
A	375	SER	17	−13.034	−13.490
A	376	THR	31	−16.126	−17.837
A	377	PHE	17	−23.430	−22.690
A	378	LYS	15	−22.490	−21.629
A	379	CYS	18	−25.250	−24.416
A	380	TYR	24	−21.319	−21.627
A	381	GLY	22	−21.177	−21.272
A	382	VAL	24	−23.109	−23.212
A	383	SER	5	−22.157	−20.184
A	384	PRO	15	−23.052	−22.126
A	385	THR	0	−21.723	−19.225
A	386	LYS	13	−22.628	−21.521
A	387	LEU	27	−25.804	−25.942
A	388	ASN	11	−23.729	−22.265
A	389	ASP	5	−20.792	−18.976
A	390	LEU	24	−23.565	−23.615
A	391	CYS	20	−24.740	−24.195
A	392	PHE	31	−25.282	−25.939
A	393	THR	11	−21.676	−20.448
A	394	ASN	6	−23.548	−21.530
A	395	VAL	31	−27.360	−27.778
A	396	TYR	13	−26.125	−24.615
A	397	ALA	28	−26.527	−26.697
A	398	ASP	27	−22.566	−23.076
A	399	SER	22	−19.218	−19.538
A	400	PHE	34	−11.938	−14.475
A	401	VAL	31	−10.183	−12.577
A	402	ILE	35	−7.473	−10.638
A	403	ARG	24	−4.897	−7.094
A	404	GLY	16	−6.089	−7.229
A	405	ASP	11	−3.358	−4.237
A	406	GLU	29	−4.184	−7.037
A	407	VAL	23	−8.843	−10.471
A	408	ARG	6	−8.871	−8.541
A	409	GLN	26	−7.140	−9.308
A	410	ILE	35	−11.892	−14.549
A	411	ALA	11	−12.958	−12.733
A	412	PRO	18	−9.600	−10.566
A	413	GLY	5	−5.473	−5.419

A	414	GLN	21	-4.403	-6.312	
A	415	THR	2	-2.416	-2.368	<=B
A	416	GLY	17	-3.240	-4.822	
A	417	LYS	18	-2.010	-3.849	
A	418	ILE	25	-5.280	-7.548	
A	419	ALA	17	-5.669	-6.972	
A	420	ASP	10	-3.088	-3.883	
A	421	TYR	22	-3.190	-5.353	
A	422	ASN	32	-5.565	-8.605	
A	423	TYR	31	-7.327	-10.050	
A	424	LYS	19	-7.146	-8.509	
A	425	LEU	32	-12.187	-14.465	
A	426	PRO	14	-9.693	-10.189	
A	427	ASP	0	-6.304	-5.579	
A	428	ASP	5	-10.601	-9.956	
A	429	PHE	27	-18.467	-19.448	
A	430	THR	14	-23.522	-22.427	
A	431	GLY	31	-27.736	-28.112	
A	432	CYS	27	-28.134	-28.004	
A	433	VAL	23	-24.812	-24.603	
A	434	ILE	31	-23.339	-24.220	
A	435	ALA	25	-15.866	-16.916	
A	436	TRP	20	-14.200	-14.867	
A	437	ASN	15	-7.134	-8.038	
A	438	SER	33	-6.696	-9.721	
A	439	ASN	19	-1.746	-3.730	
A	440	ASN	4	-1.705	-1.969	<=B
A	441	LEU	20	-3.461	-5.363	
A	442	ASP	34	-2.684	-6.285	
A	443	SER	23	0.380	-2.309	<=B
A	444	LYS	9	2.895	1.527	<=B
A	445	VAL	1	4.328	3.716	<=B
A	446	GLY	1	4.560	3.921	<=B
A	447	GLY	9	3.487	2.051	<=B
A	448	ASN	26	1.455	-1.703	<=B
A	449	TYR	5	0.963	0.278	<=B
A	450	ASN	18	0.549	-1.584	<=B
A	451	TYR	31	-2.881	-6.115	
A	452	ARG	18	-2.019	-3.857	
A	453	TYR	27	-2.984	-5.746	
A	454	ARG	30	-1.017	-4.350	
A	455	LEU	15	-1.879	-3.388	<=B
A	456	PHE	14	-1.971	-3.355	<=B
A	457	ARG	24	-0.858	-3.520	<=B
A	458	LYS	10	-0.257	-1.377	<=B
A	459	SER	5	0.427	-0.197	<=B
A	460	ASN	14	0.061	-1.556	<=B
A	461	LEU	26	-2.220	-4.954	
A	462	LYS	1	-1.757	-1.670	<=B
A	463	PRO	11	-6.556	-7.067	

A	464	PHE	18	-9.717	-10.670	
A	465	GLU	16	-4.234	-5.587	
A	466	ARG	13	-4.046	-5.075	
A	467	ASP	29	-2.323	-5.391	
A	468	ILE	2	-2.810	-2.717	<=B
A	469	SER	20	-1.616	-3.731	
A	470	THR	7	-2.606	-3.111	<=B
A	471	GLU	10	-2.937	-3.749	
A	472	ILE	16	-3.931	-5.319	
A	473	TYR	18	-3.517	-5.182	
A	474	GLN	8	-3.642	-4.143	
A	475	ALA	10	-4.058	-4.741	
A	476	GLY	10	-3.728	-4.450	
A	477	SER	0	-3.401	-3.010	<=B
A	478	THR	9	-4.221	-4.770	
A	479	PRO	1	-3.790	-3.469	<=B
A	480	CYS	18	-4.540	-6.088	
A	481	ASN	0	-3.935	-3.483	<=B
A	482	GLY	5	-4.009	-4.123	
A	483	VAL	0	-4.254	-3.765	
A	484	GLN	1	-4.489	-4.088	
A	485	GLY	18	-4.789	-6.308	
A	486	PHE	2	-4.955	-4.616	
A	487	ASN	5	-4.044	-4.154	
A	488	CYS	20	-5.199	-6.901	
A	489	TYR	11	-4.200	-4.982	
A	490	PHE	9	-4.019	-4.592	
A	491	PRO	21	-2.996	-5.066	
A	492	LEU	19	-1.723	-3.710	
A	493	GLN	13	-1.138	-2.503	<=B
A	494	SER	13	-0.372	-1.825	<=B
A	495	TYR	36	-0.520	-4.600	
A	496	GLY	4	1.981	1.293	<=B
A	497	PHE	32	0.718	-3.045	<=B
A	498	GLN	7	2.617	1.511	<=B
A	499	PRO	7	2.706	1.590	<=B
A	500	THR	3	3.644	2.880	<=B
A	501	ASN	27	3.595	0.077	<=B
A	502	GLY	1	2.380	1.991	<=B
A	503	VAL	7	-0.651	-1.381	<=B
A	504	GLY	5	-3.862	-3.993	
A	505	TYR	9	0.259	-0.806	<=B
A	506	GLN	17	-2.285	-3.977	
A	507	PRO	32	-4.574	-7.728	
A	508	TYR	26	-8.014	-10.082	
A	509	ARG	27	-13.458	-15.015	
A	510	VAL	37	-17.496	-19.739	
A	511	VAL	26	-23.789	-24.043	
A	512	VAL	30	-26.306	-26.731	
A	513	LEU	37	-29.509	-30.371	

A	514	SER	22	−27.122	−26.533	
A	515	PHE	38	−28.370	−29.477	
A	516	GLU	10	−24.019	−22.407	
A	517	LEU	16	−22.878	−22.087	
A	518	LEU	10	−19.040	−18.001	
A	519	HIS	6	−15.710	−14.594	
A	520	ALA	11	−15.975	−15.403	
A	521	PRO	9	−16.830	−15.930	
A	522	ALA	29	−20.964	−21.888	
A	523	THR	11	−21.150	−19.983	
A	524	VAL	26	−25.016	−25.129	
A	525	CYS	19	−23.633	−23.100	
A	526	GLY	20	−22.285	−22.023	
A	527	PRO	13	−18.636	−17.988	
A	528	LYS	13	−14.293	−14.144	
A	529	LYS	16	−15.254	−15.339	
A	530	SER	23	−13.334	−14.446	
A	531	THR	12	−11.103	−11.207	
A	532	ASN	3	−8.462	−7.834	
A	533	LEU	21	−9.254	−10.604	
A	534	VAL	16	−6.126	−7.261	
A	535	LYS	13	−8.023	−8.595	
A	536	ASN	3	−10.747	−9.856	
A	537	LYS	14	−11.863	−12.108	
A	538	CYS	19	−13.588	−14.210	
A	539	VAL	23	−12.078	−13.334	
A	540	ASN	4	−13.080	−12.036	
A	541	PHE	32	−12.735	−14.951	
A	542	ASN	18	−14.520	−14.921	
A	543	PHE	29	−13.991	−15.717	
A	544	ASN	20	−15.073	−15.639	
A	545	GLY	18	−16.689	−16.840	
A	546	LEU	20	−13.955	−14.650	
A	547	THR	9	−14.179	−13.583	
A	548	GLY	22	−13.054	−14.083	
A	549	THR	9	−13.328	−12.831	
A	550	GLY	21	−13.165	−14.066	
A	551	VAL	14	−12.724	−12.871	
A	552	LEU	27	−10.534	−12.427	
A	553	THR	15	−9.642	−10.258	
A	554	GLU	6	−6.138	−6.122	
A	555	SER	24	−5.347	−7.492	
A	556	ASN	0	−3.213	−2.844	<=B
A	557	LYS	22	−3.613	−5.727	
A	558	LYS	1	−0.987	−0.988	<=B
A	559	PHE	23	−1.711	−4.159	
A	560	LEU	1	−0.925	−0.934	<=B
A	561	PRO	0	−1.451	−1.284	<=B
A	562	PHE	0	−3.411	−3.019	<=B
A	563	GLN	13	−3.404	−4.508	

A	564	GLN	15	-8.362	-9.125	
A	565	PHE	16	-8.075	-8.986	
A	566	GLY	23	-5.617	-7.616	
A	567	ARG	6	-5.550	-5.602	
A	568	ASP	10	-4.309	-4.963	
A	569	ILE	0	-3.677	-3.254	<=B
A	570	ALA	3	-4.336	-4.182	
A	571	ASP	0	-4.250	-3.761	
A	572	THR	10	-6.270	-6.699	
A	573	THR	26	-7.639	-9.750	
A	574	ASP	11	-7.147	-7.590	
A	575	ALA	20	-7.611	-9.036	
A	576	VAL	28	-9.311	-11.460	
A	577	ARG	14	-8.132	-8.807	
A	578	ASP	21	-8.305	-9.765	
A	579	PRO	23	-9.872	-11.381	
A	580	GLN	15	-8.675	-9.402	
A	581	THR	11	-4.781	-5.497	
A	582	LEU	9	-4.085	-4.650	
A	583	GLU	13	-3.676	-4.748	
A	584	ILE	17	-5.134	-6.498	
A	585	LEU	33	-7.124	-10.100	
A	586	ASP	12	-7.957	-8.422	
A	587	ILE	25	-10.373	-12.055	
A	588	THR	17	-12.093	-12.657	
A	589	PRO	11	-13.408	-13.131	
A	590	CYS	25	-16.951	-17.877	
A	591	SER	18	-19.857	-19.643	
A	592	PHE	13	-21.489	-20.512	
A	593	GLY	23	-23.698	-23.617	
A	594	GLY	13	-24.322	-23.020	
A	595	VAL	30	-26.930	-27.283	
A	596	SER	24	-25.562	-25.382	
A	597	VAL	32	-27.809	-28.291	
A	598	ILE	33	-25.912	-26.728	
A	599	THR	28	-22.884	-23.472	
A	600	PRO	18	-16.340	-16.530	
A	601	GLY	7	-16.822	-15.692	
A	602	THR	17	-16.113	-16.215	
A	603	ASN	6	-12.950	-12.151	
A	604	THR	19	-10.899	-11.831	
A	605	SER	24	-15.042	-16.073	
A	606	ASN	11	-18.000	-17.195	
A	607	GLN	20	-20.208	-20.184	
A	608	VAL	33	-24.674	-25.632	
A	609	ALA	37	-26.501	-27.708	
A	610	VAL	31	-28.594	-28.871	
A	611	LEU	31	-27.882	-28.240	
A	612	TYR	26	-27.753	-27.551	
A	613	GLN	16	-24.922	-23.896	

A	614	GLY	11	−22.403	−21.091
A	615	VAL	28	−22.391	−23.036
A	616	ASN	5	−20.705	−18.899
A	617	CYS	18	−22.701	−22.160
A	618	THR	3	−18.772	−16.958
A	619	GLU	27	−20.551	−21.292
A	620	VAL	34	−23.970	−25.124
A	621	PRO	10	−18.874	−17.854
A	622	VAL	25	−19.387	−20.033
A	623	ALA	29	−19.929	−20.973
A	624	ILE	11	−16.819	−16.150
A	625	HIS	7	−13.847	−13.059
A	626	ALA	26	−15.040	−16.300
A	627	ASP	6	−11.610	−10.965
A	628	GLN	13	−16.034	−15.685
A	629	LEU	17	−20.050	−19.699
A	630	THR	26	−22.564	−22.959
A	631	PRO	17	−22.876	−22.201
A	632	THR	32	−23.749	−24.698
A	633	TRP	28	−25.330	−25.637
A	634	ARG	12	−20.139	−19.203
A	635	VAL	17	−19.916	−19.580
A	636	TYR	38	−22.901	−24.638
A	637	SER	16	−19.115	−18.757
A	638	THR	10	−15.040	−14.460
A	639	GLY	15	−17.036	−16.802
A	640	SER	2	−14.346	−12.926
A	641	ASN	21	−16.409	−16.937
A	642	VAL	20	−20.839	−20.743
A	643	PHE	28	−20.979	−21.786
A	644	GLN	7	−20.569	−19.008
A	645	THR	32	−21.147	−22.395
A	646	ARG	9	−19.256	−18.076
A	647	ALA	24	−20.955	−21.306
A	648	GLY	28	−23.359	−23.892
A	649	CYS	29	−24.220	−24.770
A	650	LEU	29	−26.759	−27.016
A	651	ILE	29	−25.611	−26.001
A	652	GLY	26	−23.249	−23.565
A	653	ALA	38	−20.657	−22.652
A	654	GLU	15	−15.724	−15.641
A	655	HIS	17	−15.315	−15.508
A	656	VAL	26	−12.584	−14.127
A	657	ASN	2	−9.355	−8.509
A	658	ASN	13	−8.027	−8.598
A	659	SER	10	−9.930	−9.938
A	660	TYR	20	−10.328	−11.440
A	661	GLU	3	−11.488	−10.511
A	662	CYS	14	−14.195	−14.172
A	663	ASP	19	−15.487	−15.891

A	664	ILE	29	−18.944	−20.100	
A	665	PRO	3	−18.276	−16.519	
A	666	ILE	41	−20.548	−22.900	
A	667	GLY	21	−19.077	−19.298	
A	668	ALA	12	−17.279	−16.672	
A	669	GLY	10	−16.074	−15.376	
A	670	ILE	30	−18.551	−19.868	
A	671	CYS	17	−18.872	−18.657	
A	672	ALA	37	−19.443	−21.462	
A	673	SER	17	−16.608	−16.653	
A	674	TYR	21	−13.494	−14.357	
A	675	GLN	21	−9.742	−11.037	
A	676	THR	10	−4.919	−5.504	
A	677	GLN	15	−5.705	−6.773	
A	678	THR	14	−4.543	−5.631	
A	679	ASN	6	−1.401	−1.930	<=B
A	680	SER	15	0.818	−1.001	<=B
A	681	ARG	2	2.957	2.387	<=B
A	682	ARG	1	2.552	2.144	<=B
A	683	ARG	0	2.714	2.402	<=B
A	684	ALA	5	2.305	1.465	<=B
A	685	ARG	13	2.358	0.592	<=B
A	686	SER	1	1.448	1.166	<=B
A	687	VAL	6	−1.624	−2.127	<=B
A	688	ALA	1	−2.867	−2.652	<=B
A	689	SER	11	−3.473	−4.339	
A	690	GLN	16	−6.584	−7.667	
A	691	SER	21	−11.305	−12.420	
A	692	ILE	36	−16.819	−19.025	
A	693	ILE	21	−15.798	−16.396	
A	694	ALA	29	−18.000	−19.265	
A	695	TYR	22	−15.862	−16.568	
A	696	THR	7	−14.876	−13.971	
A	697	MET	16	−13.819	−14.070	
A	698	SER	10	−10.101	−10.090	
A	699	LEU	4	−8.920	−8.354	
A	700	GLY	3	−7.367	−6.865	
A	701	ALA	2	−5.655	−5.235	
A	702	GLU	5	−4.546	−4.599	
A	703	ASN	6	−1.970	−2.434	<=B
A	704	SER	1	−1.370	−1.327	<=B
A	705	VAL	8	−2.519	−3.149	<=B
A	706	ALA	10	−3.533	−4.277	
A	707	TYR	3	−3.732	−3.648	<=B
A	708	SER	11	−5.197	−5.864	
A	709	ASN	5	−5.810	−5.717	
A	710	ASN	13	−6.760	−7.477	
A	711	SER	7	−5.816	−5.952	
A	712	ILE	25	−7.410	−9.433	
A	713	ALA	12	−2.682	−3.754	

A	714	ILE	26	-2.783	-5.453	
A	715	PRO	18	-3.300	-4.991	
A	716	THR	8	-2.373	-3.020	<=B
A	717	ASN	7	-3.453	-3.861	
A	718	PHE	36	-7.652	-10.912	
A	719	THR	13	-8.569	-9.079	
A	720	ILE	29	-12.456	-14.359	
A	721	SER	18	-17.774	-17.800	
A	722	VAL	31	-23.726	-24.563	
A	723	THR	18	-25.130	-24.310	
A	724	THR	31	-26.628	-27.130	
A	725	GLU	28	-26.615	-26.774	
A	726	ILE	22	-25.707	-25.280	
A	727	LEU	32	-26.366	-27.014	
A	728	PRO	24	-26.188	-25.937	
A	729	VAL	33	-26.251	-27.027	
A	730	SER	33	-24.998	-25.918	
A	731	MET	33	-22.220	-23.460	
A	732	THR	31	-24.010	-24.814	
A	733	LYS	21	-24.144	-23.782	
A	734	THR	35	-24.706	-25.890	
A	735	SER	15	-25.452	-24.250	
A	736	VAL	41	-28.417	-29.864	
A	737	ASP	17	-27.550	-26.337	
A	738	CYS	25	-28.795	-28.358	
A	739	THR	14	-28.008	-26.397	
A	740	MET	13	-28.241	-26.488	
A	741	TYR	33	-30.413	-30.710	
A	742	ILE	35	-29.214	-29.879	
A	743	CYS	22	-27.957	-27.272	
A	744	GLY	23	-26.526	-26.120	
A	745	ASP	6	-21.657	-19.857	
A	746	SER	29	-19.409	-20.512	
A	747	THR	3	-17.047	-15.431	
A	748	GLU	21	-17.561	-17.957	
A	749	CYS	29	-21.248	-22.139	
A	750	SER	9	-21.164	-19.765	
A	751	ASN	9	-17.049	-16.124	
A	752	LEU	28	-19.563	-20.533	
A	753	LEU	27	-22.284	-22.826	
A	754	LEU	7	-19.214	-17.809	
A	755	GLN	13	-16.355	-15.969	
A	756	TYR	27	-18.285	-19.287	
A	757	GLY	0	-16.639	-14.725	
A	758	SER	3	-16.020	-14.523	
A	759	PHE	26	-21.196	-21.748	
A	760	CYS	24	-24.322	-24.285	
A	761	THR	5	-19.952	-18.233	
A	762	GLN	13	-18.238	-17.636	
A	763	LEU	29	-22.857	-23.564	

A	764	ASN	15	-22.433	-21.578	
A	765	ARG	5	-17.811	-16.338	
A	766	ALA	22	-17.099	-17.663	
A	767	LEU	27	-21.791	-22.390	
A	768	THR	8	-18.876	-17.626	
A	769	GLY	16	-16.479	-16.424	
A	770	ILE	28	-19.025	-20.057	
A	771	ALA	19	-21.451	-21.169	
A	772	VAL	6	-16.926	-15.670	
A	773	GLU	19	-16.257	-16.573	
A	774	GLN	32	-18.998	-20.493	
A	775	ASP	17	-17.447	-17.395	
A	776	LYS	14	-15.404	-15.242	
A	777	ASN	31	-21.392	-22.497	
A	778	THR	27	-22.806	-23.288	
A	779	GLN	9	-20.464	-19.146	
A	780	GLU	21	-20.609	-20.654	
A	781	VAL	40	-25.518	-27.183	
A	782	PHE	33	-24.677	-25.634	
A	783	ALA	14	-19.880	-19.203	
A	784	GLN	35	-20.455	-22.127	
A	785	VAL	31	-17.303	-18.879	
A	786	LYS	3	-12.256	-11.192	
A	787	GLN	18	-12.286	-12.943	
A	788	ILE	11	-11.060	-11.053	
A	789	TYR	29	-13.079	-14.910	
A	790	LYS	5	-10.324	-9.712	
A	791	THR	31	-11.482	-13.727	
A	792	PRO	16	-4.749	-6.043	
A	793	PRO	0	-1.426	-1.262	<=B
A	794	ILE	3	-1.822	-1.958	<=B
A	795	LYS	13	-6.066	-6.863	
A	796	ASP	6	-6.355	-6.314	
A	797	PHE	27	-10.262	-12.187	
A	798	GLY	21	-9.304	-10.649	
A	799	GLY	16	-7.560	-8.531	
A	800	PHE	32	-13.660	-15.769	
A	801	ASN	17	-13.142	-13.585	
A	802	PHE	32	-16.730	-18.486	
A	803	SER	13	-10.953	-11.188	
A	804	GLN	24	-13.683	-14.869	
A	805	ILE	39	-20.281	-22.434	
A	806	LEU	21	-16.467	-16.988	
A	807	PRO	28	-11.994	-13.834	
A	808	ASP	14	-5.991	-6.912	
A	809	PRO	5	-1.437	-1.846	<=B
A	810	SER	4	0.938	0.370	<=B
A	811	LYS	20	-2.135	-4.190	
A	812	PRO	0	-1.491	-1.320	<=B
A	813	SER	21	-5.822	-7.568	

A	814	LYS	15	−6.903	−7.834
A	815	ARG	22	−13.552	−14.523
A	816	SER	32	−17.319	−19.008
A	817	PHE	14	−14.509	−14.450
A	818	ILE	35	−20.798	−22.431
A	819	GLU	33	−20.910	−22.300
A	820	ASP	15	−14.795	−14.819
A	821	LEU	26	−16.834	−17.888
A	822	LEU	35	−20.869	−22.494
A	823	PHE	21	−16.825	−17.305
A	824	ASN	14	−13.740	−13.770
A	825	LYS	29	−14.415	−16.093
A	826	VAL	38	−15.972	−18.505
A	827	THR	5	−18.305	−16.775
A	828	LEU	23	−21.690	−21.841
A	829	ALA	25	−22.309	−22.618
A	830	ASP	27	−20.916	−21.616
A	831	ALA	14	−20.083	−19.384
A	832	GLY	22	−17.284	−17.827
A	833	PHE	9	−13.289	−12.796
A	834	ILE	3	−13.904	−12.650
A	835	LYS	24	−13.436	−14.651
A	836	GLN	3	−9.802	−9.020
A	837	TYR	1	−11.374	−10.181
A	838	GLY	1	−8.374	−7.526
A	839	ASP	8	−10.940	−10.602
A	840	CYS	16	−15.800	−15.823
A	841	LEU	4	−12.357	−11.396
A	842	GLY	5	−8.015	−7.668
A	843	ASP	2	−8.820	−8.036
A	844	ILE	13	−12.784	−12.809
A	845	ALA	11	−15.291	−14.797
A	846	ALA	13	−15.434	−15.154
A	847	ARG	11	−17.378	−16.645
A	848	ASP	21	−18.239	−18.557
A	849	LEU	18	−21.329	−20.946
A	850	ILE	24	−22.445	−22.624
A	851	CYS	15	−20.815	−20.146
A	852	ALA	24	−24.452	−24.400
A	853	GLN	28	−26.370	−26.558
A	854	LYS	23	−26.134	−25.774
A	855	PHE	17	−26.259	−25.194
A	856	ASN	25	−29.037	−28.573
A	857	GLY	26	−28.875	−28.544
A	858	LEU	31	−29.498	−29.671
A	859	THR	18	−26.876	−25.855
A	860	VAL	29	−22.993	−23.684
A	861	LEU	19	−22.997	−22.537
A	862	PRO	11	−18.237	−17.404
A	863	PRO	28	−17.290	−18.522

A	864	LEU	18	−13.233	−13.781
A	865	LEU	29	−15.075	−16.677
A	866	THR	8	−12.811	−12.258
A	867	ASP	24	−15.793	−16.737
A	868	GLU	8	−11.883	−11.437
A	869	MET	14	−14.365	−14.323
A	870	ILE	31	−20.686	−21.872
A	871	ALA	23	−18.836	−19.315
A	872	GLN	11	−15.681	−15.143
A	873	TYR	27	−20.511	−21.257
A	874	THR	38	−23.379	−25.061
A	875	SER	23	−19.062	−19.515
A	876	ALA	22	−18.202	−18.639
A	877	LEU	36	−24.394	−25.729
A	878	LEU	32	−23.735	−24.686
A	879	ALA	25	−19.935	−20.518
A	880	GLY	35	−22.133	−23.612
A	881	THR	33	−24.029	−25.060
A	882	ILE	29	−20.133	−21.153
A	883	THR	20	−16.362	−16.780
A	884	SER	27	−17.052	−18.196
A	885	GLY	17	−20.501	−20.099
A	886	TRP	22	−21.536	−21.589
A	887	THR	15	−17.099	−16.857
A	888	PHE	31	−17.912	−19.417
A	889	GLY	26	−19.686	−20.412
A	890	ALA	13	−14.115	−13.987
A	891	GLY	4	−11.130	−10.310
A	892	ALA	1	−11.878	−10.627
A	893	ALA	22	−13.700	−14.655
A	894	LEU	12	−11.750	−11.779
A	895	GLN	10	−11.102	−10.975
A	896	ILE	19	−11.099	−12.008
A	897	PRO	11	−11.391	−11.346
A	898	PHE	26	−14.564	−15.879
A	899	ALA	17	−12.874	−13.348
A	900	MET	9	−11.241	−10.983
A	901	GLN	31	−13.963	−15.922
A	902	MET	28	−14.544	−16.092
A	903	ALA	14	−10.717	−11.095
A	904	TYR	18	−11.043	−11.843
A	905	ARG	38	−14.824	−17.490
A	906	PHE	27	−10.734	−12.605
A	907	ASN	10	−8.618	−8.777
A	908	GLY	30	−10.924	−13.118
A	909	ILE	32	−9.386	−11.987
A	910	GLY	21	−6.397	−8.076
A	911	VAL	37	−7.283	−10.700
A	912	THR	19	−3.428	−5.219
A	913	GLN	11	−4.909	−5.610

A	914	ASN	7	−0.936	−1.634	<=B
A	915	VAL	29	−2.910	−5.910	
A	916	LEU	26	−7.290	−9.441	
A	917	TYR	9	−2.451	−3.204	<=B
A	918	GLU	11	−1.936	−2.979	<=B
A	919	ASN	23	−2.480	−4.840	
A	920	GLN	19	−4.846	−6.474	
A	921	LYS	1	−4.299	−3.919	
A	922	LEU	14	−3.885	−5.048	
A	923	ILE	28	−8.663	−10.887	
A	924	ALA	20	−10.630	−11.708	
A	925	ASN	7	−7.439	−7.389	
A	926	GLN	23	−11.084	−12.454	
A	927	PHE	30	−14.868	−16.608	
A	928	ASN	12	−14.124	−13.880	
A	929	SER	11	−12.715	−12.517	
A	930	ALA	28	−17.310	−18.540	
A	931	ILE	25	−19.041	−19.727	
A	932	GLY	10	−15.614	−14.969	
A	933	LYS	14	−14.919	−14.813	
A	934	ILE	35	−18.982	−20.824	
A	935	GLN	15	−15.579	−15.513	
A	936	ASP	8	−11.788	−11.353	
A	937	SER	17	−13.802	−14.170	
A	938	LEU	31	−15.047	−16.881	
A	939	SER	8	−9.976	−9.749	
A	940	SER	6	−8.337	−8.068	
A	941	THR	10	−10.115	−10.102	
A	942	ALA	3	−10.508	−9.645	
A	943	SER	4	−14.622	−13.400	
A	944	ALA	27	−19.093	−20.002	
A	945	LEU	33	−20.129	−21.609	
A	946	GLY	7	−17.813	−16.569	
A	947	LYS	21	−19.044	−19.269	
A	948	LEU	32	−23.463	−24.444	
A	949	GLN	12	−18.746	−17.970	
A	950	ASN	14	−19.686	−19.032	
A	951	VAL	35	−21.259	−22.839	
A	952	VAL	21	−23.468	−23.184	
A	953	ASN	11	−21.413	−20.215	
A	954	GLN	23	−19.728	−20.105	
A	955	ASN	36	−24.223	−25.578	
A	956	ALA	17	−23.815	−23.031	
A	957	GLN	11	−23.043	−21.658	
A	958	ALA	29	−24.028	−24.600	
A	959	LEU	30	−26.296	−26.722	
A	960	ASN	15	−26.046	−24.776	
A	961	THR	22	−25.945	−25.491	
A	962	LEU	38	−29.230	−30.238	
A	963	VAL	19	−29.258	−28.078	

A	964	LYS	12	−26.495	−24.828
A	965	GLN	27	−25.339	−25.530
A	966	LEU	28	−27.802	−27.825
A	967	SER	11	−23.635	−22.182
A	968	SER	22	−21.137	−21.237
A	969	ASN	4	−16.901	−15.418
A	970	PHE	23	−15.835	−16.659
A	971	GLY	7	−10.999	−10.540
A	972	ALA	30	−13.724	−15.595
A	973	ILE	13	−10.350	−10.655
A	974	SER	12	−13.142	−13.010
A	975	SER	9	−20.045	−18.775
A	976	VAL	4	−20.892	−18.949
A	977	LEU	24	−21.823	−22.073
A	978	ASN	4	−17.990	−16.381
A	979	ASP	11	−12.144	−12.013
A	980	ILE	31	−14.978	−16.820
A	981	LEU	17	−13.658	−14.043
A	982	SER	7	−10.253	−9.879
A	983	ARG	12	−9.356	−9.660
A	984	LEU	20	−10.702	−11.771
A	985	ASP	1	−9.784	−8.774
A	986	LYS	2	−10.254	−9.305
A	987	VAL	0	−10.344	−9.155
A	988	GLU	10	−11.224	−11.083
A	989	ALA	20	−14.344	−14.995
A	990	GLU	7	−15.405	−14.439
A	991	VAL	6	−14.596	−13.608
A	992	GLN	22	−15.845	−16.553
A	993	ILE	31	−19.846	−21.128
A	994	ASP	10	−19.143	−18.092
A	995	ARG	18	−18.286	−18.253
A	996	LEU	35	−21.742	−23.267
A	997	ILE	23	−23.316	−23.279
A	998	THR	10	−20.780	−19.541
A	999	GLY	22	−20.870	−21.000
A	1000	ARG	34	−24.743	−25.807
A	1001	LEU	21	−25.479	−24.964
A	1002	GLN	9	−21.030	−19.646
A	1003	SER	32	−23.412	−24.400
A	1004	LEU	32	−25.786	−26.500
A	1005	GLN	10	−21.692	−20.348
A	1006	THR	19	−19.814	−19.721
A	1007	TYR	39	−22.784	−24.649
A	1008	VAL	25	−22.156	−22.483
A	1009	THR	7	−15.173	−14.233
A	1010	GLN	20	−14.702	−15.311
A	1011	GLN	38	−21.204	−23.135
A	1012	LEU	14	−16.029	−15.795
A	1013	ILE	8	−13.025	−12.447

A	1014	ARG	28	−17.194	−18.437
A	1015	ALA	22	−18.923	−19.276
A	1016	ALA	6	−15.569	−14.469
A	1017	GLU	18	−16.249	−16.450
A	1018	ILE	34	−20.217	−21.802
A	1019	ARG	13	−20.213	−19.383
A	1020	ALA	8	−16.961	−15.930
A	1021	SER	24	−21.882	−22.126
A	1022	ALA	27	−22.641	−23.142
A	1023	ASN	7	−18.908	−17.539
A	1024	LEU	21	−20.237	−20.325
A	1025	ALA	35	−25.354	−26.464
A	1026	ALA	19	−23.806	−23.253
A	1027	THR	13	−21.771	−20.762
A	1028	LYS	35	−26.095	−27.119
A	1029	MET	35	−29.222	−29.886
A	1030	SER	11	−23.152	−21.755
A	1031	GLU	16	−23.152	−22.329
A	1032	CYS	38	−28.354	−29.463
A	1033	VAL	33	−28.641	−29.142
A	1034	LEU	25	−26.051	−25.930
A	1035	GLY	15	−24.013	−22.977
A	1036	GLN	24	−22.685	−22.836
A	1037	SER	24	−21.702	−21.966
A	1038	LYS	9	−13.520	−13.000
A	1039	ARG	16	−12.971	−13.320
A	1040	VAL	2	−12.355	−11.164
A	1041	ASP	1	−15.684	−13.995
A	1042	PHE	20	−19.179	−19.273
A	1043	CYS	32	−26.056	−26.740
A	1044	GLY	27	−23.930	−24.283
A	1045	LYS	2	−19.067	−17.104
A	1046	GLY	25	−14.236	−15.473
A	1047	TYR	21	−12.729	−13.680
A	1048	HIS	27	−19.643	−20.489
A	1049	LEU	36	−20.208	−22.024
A	1050	MET	34	−26.745	−27.579
A	1051	SER	38	−28.814	−29.871
A	1052	PHE	35	−28.481	−29.231
A	1053	PRO	42	−28.442	−30.001
A	1054	GLN	36	−24.715	−26.013
A	1055	SER	29	−25.452	−25.860
A	1056	ALA	33	−24.299	−25.300
A	1057	PRO	25	−23.688	−23.839
A	1058	HIS	38	−26.060	−27.433
A	1059	GLY	32	−26.235	−26.898
A	1060	VAL	44	−27.765	−29.632
A	1061	VAL	35	−26.875	−27.810
A	1062	PHE	36	−30.449	−31.087
A	1063	LEU	36	−28.919	−29.733

A	1064	HIS	28	−28.781	−28.691	
A	1065	VAL	36	−25.514	−26.720	
A	1066	THR	21	−19.991	−20.107	
A	1067	TYR	32	−12.903	−15.099	
A	1068	VAL	17	−10.403	−11.161	
A	1069	PRO	18	−7.615	−8.809	
A	1070	ALA	11	−5.600	−6.221	
A	1071	GLN	3	−2.593	−2.640	<=B
A	1072	LYS	15	−2.442	−3.886	
A	1073	LYS	17	−2.575	−4.233	
A	1074	ASN	9	−2.520	−3.265	<=B
A	1075	PHE	30	−5.023	−7.895	
A	1076	THR	12	−6.205	−6.871	
A	1077	THR	25	−7.807	−9.784	
A	1078	ALA	27	−9.078	−11.139	
A	1079	PRO	13	−9.660	−10.044	
A	1080	ALA	20	−10.235	−11.358	
A	1081	ILE	30	−9.343	−11.719	
A	1082	CYS	13	−9.344	−9.764	
A	1083	HIS	22	−7.533	−9.197	
A	1084	ASP	13	−7.490	−8.124	
A	1085	GLY	0	−8.170	−7.230	
A	1086	LYS	13	−8.534	−9.047	
A	1087	ALA	15	−9.261	−9.921	
A	1088	HIS	29	−8.738	−11.068	
A	1089	PHE	13	−8.558	−9.069	
A	1090	PRO	20	−5.756	−7.394	
A	1091	ARG	11	−5.580	−6.203	
A	1092	GLU	16	−4.266	−5.616	
A	1093	GLY	31	−5.354	−8.303	
A	1094	VAL	22	−7.171	−8.876	
A	1095	PHE	33	−7.925	−10.808	
A	1096	VAL	24	−6.878	−8.847	
A	1097	SER	18	−5.873	−7.268	
A	1098	ASN	12	−3.226	−4.235	
A	1099	GLY	2	−4.108	−3.865	
A	1100	THR	0	−3.678	−3.255	<=B
A	1101	HIS	9	−2.729	−3.450	<=B
A	1102	TRP	26	−5.213	−7.603	
A	1103	PHE	19	−4.576	−6.235	
A	1104	VAL	24	−5.831	−7.921	
A	1105	THR	26	−5.254	−7.640	
A	1106	GLN	18	−3.463	−5.135	
A	1107	ARG	13	−5.393	−6.268	
A	1108	ASN	23	−4.315	−6.464	
A	1109	PHE	22	−3.960	−6.034	
A	1110	TYR	21	−2.984	−5.055	
A	1111	GLU	20	−1.170	−3.335	<=B
A	1112	PRO	20	−2.491	−4.505	
A	1113	GLN	23	−1.789	−4.228	

A	1114	ILE	7	-3.107	-3.555	<=B
A	1115	ILE	31	-4.952	-7.947	
A	1116	THR	10	-5.166	-5.722	
A	1117	THR	8	-4.673	-5.056	
A	1118	ASP	8	-3.082	-3.648	<=B
A	1119	ASN	25	-5.616	-7.845	
A	1120	THR	32	-6.356	-9.305	
A	1121	PHE	4	-7.108	-6.751	
A	1122	VAL	15	-7.804	-8.632	
A	1123	SER	8	-8.284	-8.252	
A	1124	GLY	10	-8.610	-8.770	
A	1125	ASN	3	-8.638	-7.990	
A	1126	CYS	12	-10.645	-10.801	
A	1127	ASP	0	-9.612	-8.506	
A	1128	VAL	8	-9.374	-9.216	
A	1129	VAL	23	-10.694	-12.109	
A	1130	ILE	2	-10.128	-9.194	
A	1131	GLY	11	-10.190	-10.283	
A	1132	ILE	23	-10.565	-11.995	
A	1133	VAL	21	-9.504	-10.826	
A	1134	ASN	2	-8.073	-7.374	
A	1135	ASN	33	-6.910	-9.910	
A	1136	THR	4	-6.307	-6.042	
A	1137	VAL	25	-6.839	-8.928	
A	1138	TYR	14	-3.944	-5.101	
A	1139	ASP	11	-3.136	-4.040	
A	1140	PRO	8	-1.019	-1.822	<=B
A	1141	LEU	3	-0.698	-0.962	<=B
A	1142	GLN	7	-0.275	-1.048	<=B
A	1143	PRO	6	0.811	0.028	<=B
A	1144	GLU	5	0.687	0.033	<=B
A	1145	LEU	5	0.972	0.285	<=B
A	1146	ASP	6	2.197	1.255	<=B
A	1147	SER	5	1.067	0.370	<=B
A	1148	PHE	6	1.136	0.315	<=B
A	1149	LYS	6	1.732	0.843	<=B
A	1150	GLU	5	2.624	1.748	<=B
A	1151	GLU	6	2.414	1.446	<=B
A	1152	LEU	7	2.170	1.115	<=B
A	1153	ASP	6	2.852	1.834	<=B
A	1154	LYS	5	2.857	1.954	<=B
A	1155	TYR	5	2.668	1.787	<=B
A	1156	PHE	6	3.001	1.966	<=B
A	1157	LYS	6	3.278	2.211	<=B
A	1158	ASN	6	3.173	2.118	<=B
A	1159	HIS	7	2.974	1.827	<=B
A	1160	THR	5	3.208	2.264	<=B
A	1161	SER	5	3.113	2.180	<=B
A	1162	PRO	4	3.212	2.383	<=B

Identified 117 B-Cell epitope residues out of 1149 total residues