A	14	GLN	10	−15.632	−14.984
A	15	CYS	11	−16.632	−15.985
A	16	VAL	18	−12.955	−13.535
A	17	ASN	2	−12.273	−11.091
A	18	PHE	36	−11.909	−14.680
A	19	THR	4	−8.403	−7.896
A	20	ASN	23	−7.121	−8.947
A	21	ARG	25	−7.099	−9.157
A	22	THR	16	−6.744	−7.808
A	23	GLN	0	−5.109	−4.521
A	24	LEU	20	−5.177	−6.881
A	25	PRO	2	−5.788	−5.352
A	26	SER	11	−9.617	−9.776
A	27	ALA	19	−10.725	−11.677
A	28	TYR	9	−11.984	−11.641
A	29	THR	21	−13.707	−14.545
A	30	ASN	9	−15.371	−14.639
A	31	SER	31	−16.840	−18.469
A	32	PHE	14	−17.384	−16.995
A	33	THR	17	−18.240	−18.097
A	34	ARG	34	−18.485	−20.269
A	35	GLY	40	−21.327	−23.474
A	36	VAL	30	−20.385	−21.491
A	37	TYR	35	−16.933	−19.011
A	38	TYR	21	−15.009	−15.698
A	39	PRO	25	−14.922	−16.081
A	40	ASP	12	−11.322	−11.400
A	41	LYS	7	−7.013	−7.012
A	42	VAL	9	−12.033	−11.684
A	43	PHE	5	−10.921	−10.240
A	44	ARG	23	−14.427	−15.413
A	45	SER	11	−14.327	−13.944
A	46	SER	12	−15.771	−15.337
A	47	VAL	18	−18.678	−18.600
A	48	LEU	20	−19.861	−19.877
A	49	HIS	26	−19.393	−20.153
A	50	SER	16	−19.149	−18.787
A	51	THR	22	−17.722	−18.214
A	52	GLN	7	−14.988	−14.069
A	53	ASP	24	−14.486	−15.580
A	54	LEU	20	−16.983	−17.330
A	55	PHE	33	−20.125	−21.606
A	56	LEU	34	−19.720	−21.362
A	57	PRO	21	−21.336	−21.298
A	58	PHE	26	−21.521	−22.036
A	59	PHE	12	−19.987	−19.068
A	60	SER	26	−17.572	−18.541
A	61	ASN	5	−15.824	−14.579
A	62	VAL	36	−16.840	−19.043
A	63	THR	21	−15.275	−15.934

A	64	TRP	21	−15.394	−16.039	
A	65	PHE	23	−17.002	−17.691	
A	66	HIS	21	−14.079	−14.875	
A	67	ALA	33	−14.206	−16.367	
A	68	ILE	15	−9.150	−9.823	
A	69	HIS	28	−5.250	−7.867	
A	70	VAL	12	−2.665	−3.739	
A	71	SER	7	−1.666	−2.279	<=B
A	72	GLY	1	−0.848	−0.865	<=B
A	73	THR	15	−0.696	−2.341	<=B
A	74	ASN	11	−0.591	−1.788	<=B
A	75	GLY	13	−2.201	−3.443	<=B
A	76	THR	31	−5.241	−8.203	
A	77	LYS	13	−7.392	−8.037	
A	78	ARG	16	−10.165	−10.836	
A	79	PHE	29	−14.710	−16.353	
A	80	ASP	21	−17.931	−18.284	
A	81	ASN	34	−21.735	−23.145	
A	82	PRO	20	−19.718	−19.751	
A	83	VAL	19	−21.433	−21.154	
A	84	LEU	27	−21.602	−22.223	
A	85	PRO	8	−15.155	−14.333	
A	86	PHE	30	−18.364	−19.702	
A	87	ASN	3	−13.207	−12.033	
A	88	ASP	11	−13.895	−13.562	
A	89	GLY	27	−20.647	−21.378	
A	90	VAL	25	−23.336	−23.528	
A	91	TYR	38	−22.883	−24.621	
A	92	PHE	32	−26.100	−26.778	
A	93	ALA	41	−22.115	−24.286	
A	94	SER	23	−20.105	−20.438	
A	95	THR	25	−15.270	−16.389	
A	96	GLU	26	−14.363	−15.701	
A	97	LYS	21	−7.022	−8.630	
A	98	SER	29	−6.452	−9.045	
A	99	ASN	21	−13.408	−14.281	
A	100	ILE	34	−17.942	−19.788	
A	101	ILE	30	−23.411	−24.169	
A	102	ARG	37	−24.874	−26.269	
A	103	GLY	33	−29.189	−29.627	
A	104	TRP	27	−30.986	−30.527	
A	105	ILE	32	−29.799	−30.052	
A	106	PHE	35	−26.956	−27.881	
A	107	GLY	31	−22.197	−23.210	
A	108	THR	11	−15.672	−15.135	
A	109	THR	13	−13.598	−13.529	
A	110	LEU	25	−18.900	−19.602	
A	111	ASP	5	−14.230	−13.169	
A	112	SER	16	−15.099	−15.203	
A	113	LYS	7	−10.086	−9.731	

A	114	THR	13	−12.160	−12.257	
A	115	GLN	17	−15.699	−15.848	
A	116	SER	32	−21.133	−22.383	
A	117	LEU	29	−24.132	−24.692	
A	118	LEU	38	−28.069	−29.211	
A	119	ILE	23	−28.679	−28.026	
A	120	VAL	28	−27.786	−27.811	
A	121	ASN	16	−24.307	−23.352	
A	122	ASN	24	−21.307	−21.616	
A	123	ALA	16	−14.470	−14.646	
A	124	THR	7	−11.785	−11.235	
A	125	ASN	11	−17.503	−16.756	
A	126	VAL	13	−22.381	−21.302	
A	127	VAL	17	−23.043	−22.348	
A	128	ILE	17	−23.418	−22.680	
A	129	LYS	21	−22.272	−22.126	
A	130	VAL	18	−20.684	−20.375	
A	131	CYS	22	−18.869	−19.229	
A	132	GLU	5	−16.179	−14.893	
A	133	PHE	33	−19.842	−21.355	
A	134	GLN	7	−18.177	−16.891	
A	135	PHE	33	−21.737	−23.032	
A	136	CYS	22	−19.166	−19.492	
A	137	ASN	5	−15.781	−14.541	
A	138	TYR	15	−19.091	−18.621	
A	139	PRO	28	−24.079	−24.530	
A	140	PHE	29	−24.868	−25.343	
A	141	LEU	30	−20.777	−21.838	
A	142	GLY	24	−14.374	−15.481	
A	143	VAL	28	−8.342	−10.602	
A	144	TYR	9	−4.798	−5.281	
A	145	TYR	23	−1.595	−4.057	
A	146	HIS	10	0.572	−0.644	<=B
A	147	LYS	15	1.014	−0.828	<=B
A	148	ASN	0	3.243	2.870	<=B
A	149	ASN	10	2.690	1.230	<=B
A	150	LYS	0	2.575	2.279	<=B
A	151	SER	9	1.226	0.050	<=B
A	152	TRP	23	−1.723	−4.170	
A	153	MET	6	−5.818	−5.839	
A	154	GLU	24	−9.454	−11.127	
A	155	SER	16	−8.661	−9.505	
A	156	GLU	30	−13.575	−15.464	
A	157	PHE	19	−18.857	−18.874	
A	158	ARG	22	−20.337	−20.528	
A	159	VAL	34	−25.762	−26.709	
A	160	TYR	31	−21.709	−22.778	
A	161	SER	11	−17.815	−17.032	
A	162	SER	10	−17.309	−16.469	
A	163	ALA	17	−18.124	−17.995	

A	164	ASN	14	−15.002	−14.887	
A	165	ASN	11	−12.666	−12.474	
A	166	CYS	16	−15.988	−15.989	
A	167	THR	14	−14.398	−14.352	
A	168	PHE	19	−15.650	−16.036	
A	169	GLU	8	−17.120	−16.071	
A	170	TYR	15	−16.643	−16.454	
A	171	VAL	9	−16.826	−15.926	
A	172	SER	18	−13.990	−14.451	
A	173	GLN	0	−9.927	−8.785	
A	174	PRO	1	−9.665	−8.668	
A	175	PHE	12	−6.423	−7.065	
A	176	LEU	7	−5.456	−5.633	
A	177	MET	20	−6.845	−8.358	
A	178	ASP	9	−5.487	−5.891	
A	179	LEU	30	−7.761	−10.318	
A	180	GLU	10	−3.447	−4.201	
A	181	GLY	19	−2.078	−4.024	
A	182	LYS	16	−0.953	−2.683	<=B
A	183	GLN	14	−0.558	−2.104	<=B
A	184	GLY	1	−1.323	−1.286	<=B
A	185	ASN	9	−3.845	−4.438	
A	186	PHE	30	−7.523	−10.108	
A	187	LYS	9	−6.735	−6.995	
A	188	ASN	22	−11.748	−12.927	
A	189	LEU	25	−15.533	−16.622	
A	190	SER	16	−18.349	−18.078	
A	191	GLU	33	−21.949	−23.220	
A	192	PHE	26	−24.536	−24.705	
A	193	VAL	29	−22.176	−22.961	
A	194	PHE	34	−24.358	−25.467	
A	195	LYS	25	−21.340	−21.761	
A	196	ASN	22	−14.269	−15.158	
A	197	ILE	18	−11.284	−12.056	
A	198	ASP	1	−7.018	−6.326	
A	199	GLY	3	−10.776	−9.882	
A	200	TYR	10	−13.508	−13.104	
A	201	PHE	28	−16.405	−17.739	
A	202	LYS	22	−18.099	−18.547	
A	203	ILE	22	−20.454	−20.631	
A	204	TYR	26	−18.161	−19.062	
A	205	SER	17	−18.253	−18.109	
A	206	LYS	23	−16.143	−16.932	
A	207	HIS	8	−12.059	−11.592	
A	208	THR	18	−9.077	−10.103	
A	209	PRO	0	−5.642	−4.993	
A	210	ILE	27	−6.143	−8.542	
A	211	ASN	0	−4.211	−3.726	
A	212	LEU	17	−6.264	−7.499	
A	213	VAL	1	−4.883	−4.436	

A	214	ARG	6	−7.495	−7.323	
A	215	ASP	10	−11.219	−11.078	
A	216	LEU	32	−14.621	−16.620	
A	217	PRO	23	−11.192	−12.550	
A	218	GLN	2	−12.513	−11.304	
A	219	GLY	17	−13.657	−14.041	
A	220	PHE	20	−15.498	−16.016	
A	221	SER	20	−14.760	−15.362	
A	222	ALA	25	−16.372	−17.364	
A	223	LEU	28	−18.104	−19.242	
A	224	GLU	8	−12.639	−12.105	
A	225	PRO	14	−12.999	−13.114	
A	226	LEU	15	−12.743	−13.003	
A	227	VAL	10	−15.164	−14.570	
A	228	ASP	9	−12.773	−12.339	
A	229	LEU	31	−16.049	−17.768	
A	230	PRO	0	−11.663	−10.322	
A	231	ILE	32	−15.898	−17.749	
A	232	GLY	7	−13.185	−12.473	
A	233	ILE	39	−15.672	−18.355	
A	234	ASN	9	−14.572	−13.931	
A	235	ILE	33	−17.833	−19.577	
A	236	THR	7	−15.032	−14.108	
A	237	ARG	13	−20.676	−19.793	
A	238	PHE	35	−26.065	−27.093	
A	239	GLN	29	−27.285	−27.482	
A	240	THR	30	−28.914	−29.039	
A	241	LEU	29	−27.923	−28.047	
A	242	LEU	34	−24.586	−25.669	
A	243	ALA	30	−18.976	−20.244	
A	244	LEU	32	−14.906	−16.872	
A	245	HIS	33	−8.067	−10.934	
A	246	ARG	20	−4.220	−6.035	
A	247	SER	17	−0.902	−2.753	<=B
A	248	TYR	11	0.041	−1.229	<=B
A	249	LEU	13	−0.941	−2.328	<=B
A	250	THR	11	−0.402	−1.620	<=B
A	251	PRO	0	1.118	0.989	<=B
A	252	GLY	2	−1.191	−1.284	<=B
A	253	ASP	17	−2.987	−4.598	
A	254	SER	3	−4.162	−4.028	
A	255	SER	11	−6.140	−6.699	
A	256	SER	12	−6.284	−6.941	
A	257	GLY	9	−4.481	−5.001	
A	258	TRP	30	−4.635	−7.552	
A	259	THR	24	−5.004	−7.189	
A	260	ALA	28	−11.386	−13.297	
A	261	GLY	32	−10.248	−12.749	
A	262	ALA	20	−8.551	−9.868	
A	263	ALA	32	−12.092	−14.382	

A	264	ALA	24	−15.702	−16.656
A	265	TYR	34	−20.370	−21.938
A	266	TYR	32	−19.381	−20.832
A	267	VAL	26	−22.884	−23.242
A	268	GLY	31	−21.805	−22.863
A	269	TYR	14	−19.282	−18.674
A	270	LEU	30	−19.189	−20.432
A	271	GLN	22	−15.120	−15.911
A	272	PRO	7	−14.083	−13.269
A	273	ARG	31	−16.304	−17.994
A	274	THR	19	−18.125	−18.226
A	275	PHE	27	−19.606	−20.457
A	276	LEU	21	−19.433	−19.613
A	277	LEU	32	−18.411	−19.974
A	278	LYS	18	−17.008	−17.122
A	279	TYR	22	−16.561	−17.187
A	280	ASN	8	−12.027	−11.564
A	281	GLU	3	−9.994	−9.190
A	282	ASN	5	−7.340	−7.071
A	283	GLY	10	−11.639	−11.451
A	284	THR	8	−12.730	−12.186
A	285	ILE	29	−15.595	−17.137
A	286	THR	14	−14.352	−14.312
A	287	ASP	13	−15.732	−15.418
A	288	ALA	32	−18.652	−20.187
A	289	VAL	26	−19.455	−20.208
A	290	ASP	24	−21.442	−21.736
A	291	CYS	25	−22.290	−22.601
A	292	ALA	23	−25.038	−24.803
A	293	LEU	28	−24.010	−24.469
A	294	ASP	21	−25.166	−24.687
A	295	PRO	32	−26.657	−27.271
A	296	LEU	22	−26.527	−26.006
A	297	SER	23	−23.260	−23.230
A	298	GLU	26	−24.455	−24.633
A	299	THR	26	−24.028	−24.255
A	300	LYS	30	−18.641	−19.947
A	301	CYS	23	−21.095	−21.314
A	302	THR	23	−19.393	−19.808
A	303	LEU	23	−18.111	−18.674
A	304	LYS	12	−19.138	−18.317
A	305	SER	12	−19.674	−18.791
A	306	PHE	15	−17.819	−17.495
A	307	THR	5	−15.906	−14.651
A	308	VAL	30	−19.996	−21.146
A	309	GLU	7	−18.989	−17.610
A	310	LYS	18	−19.607	−19.422
A	311	GLY	11	−21.261	−20.081
A	312	ILE	29	−24.488	−25.007
A	313	TYR	27	−23.725	−24.101

A	314	GLN	8	−23.083	−21.348
A	315	THR	32	−23.416	−24.403
A	316	SER	20	−23.460	−23.062
A	317	ASN	9	−21.172	−19.773
A	318	PHE	34	−23.492	−24.701
A	319	ARG	13	−19.869	−19.079
A	320	VAL	29	−19.551	−20.638
A	321	GLN	12	−14.965	−14.624
A	322	PRO	17	−12.748	−13.237
A	323	THR	16	−10.536	−11.164
A	324	GLU	12	−10.415	−10.597
A	325	SER	7	−12.533	−11.897
A	326	ILE	27	−12.739	−14.379
A	327	VAL	17	−14.693	−14.959
A	328	ARG	31	−13.552	−15.559
A	329	PHE	26	−13.665	−15.083
A	330	PRO	21	−12.111	−13.134
A	331	ASN	5	−11.953	−11.154
A	332	ILE	25	−14.218	−15.458
A	333	THR	1	−12.131	−10.851
A	334	ASN	10	−14.187	−13.706
A	335	LEU	12	−20.838	−19.821
A	336	CYS	33	−25.130	−26.035
A	337	PRO	16	−24.652	−23.657
A	338	PHE	18	−27.395	−26.315
A	339	GLY	5	−20.435	−18.660
A	340	GLU	15	−20.683	−20.030
A	341	VAL	30	−24.901	−25.487
A	342	PHE	24	−22.574	−22.738
A	343	ASN	8	−16.833	−15.817
A	344	ALA	21	−13.610	−14.460
A	345	THR	1	−8.792	−7.896
A	346	ARG	13	−9.677	−10.059
A	347	PHE	38	−13.893	−16.665
A	348	ALA	23	−11.784	−13.074
A	349	SER	24	−8.323	−10.126
A	350	VAL	38	−10.833	−13.957
A	351	TYR	19	−8.126	−9.376
A	352	ALA	12	−8.076	−8.528
A	353	TRP	34	−11.318	−13.927
A	354	ASN	21	−14.309	−15.078
A	355	ARG	17	−21.090	−20.620
A	356	LYS	21	−23.514	−23.225
A	357	ARG	7	−22.628	−20.831
A	358	ILE	34	−25.964	−26.888
A	359	SER	11	−22.416	−21.103
A	360	ASN	0	−17.986	−15.917
A	361	CYS	20	−20.807	−20.714
A	362	VAL	12	−22.540	−21.328
A	363	ALA	31	−26.581	−27.089

A	364	ASP	13	−24.757	−23.405
A	365	TYR	30	−27.745	−28.005
A	366	SER	9	−22.290	−20.762
A	367	VAL	13	−21.675	−20.678
A	368	LEU	35	−25.144	−26.277
A	369	TYR	16	−23.309	−22.468
A	370	ASN	5	−19.126	−17.501
A	371	SER	18	−18.207	−18.183
A	372	ALA	0	−13.064	−11.562
A	373	SER	19	−13.365	−14.013
A	374	PHE	24	−17.552	−18.294
A	375	SER	17	−13.518	−13.919
A	376	THR	31	−17.502	−19.055
A	377	PHE	17	−23.441	−22.700
A	378	LYS	15	−22.686	−21.802
A	379	CYS	18	−25.237	−24.404
A	380	TYR	24	−21.618	−21.892
A	381	GLY	22	−20.972	−21.090
A	382	VAL	24	−23.118	−23.220
A	383	SER	5	−22.176	−20.201
A	384	PRO	15	−23.061	−22.134
A	385	THR	0	−21.740	−19.240
A	386	LYS	13	−22.622	−21.516
A	387	LEU	27	−25.762	−25.904
A	388	ASN	11	−23.749	−22.283
A	389	ASP	5	−20.807	−18.989
A	390	LEU	24	−23.572	−23.621
A	391	CYS	20	−24.757	−24.210
A	392	PHE	31	−25.289	−25.946
A	393	THR	11	−21.683	−20.454
A	394	ASN	6	−23.533	−21.517
A	395	VAL	31	−27.348	−27.768
A	396	TYR	13	−26.740	−25.160
A	397	ALA	28	−27.740	−27.770
A	398	ASP	26	−24.325	−24.518
A	399	SER	22	−21.229	−21.318
A	400	PHE	34	−14.845	−17.048
A	401	VAL	31	−13.441	−15.461
A	402	ILE	35	−10.903	−13.674
A	403	ARG	25	−8.220	−10.150
A	404	GLY	17	−8.777	−9.723
A	405	ASP	11	−6.154	−6.712
A	406	GLU	29	−7.245	−9.747
A	407	VAL	23	−11.535	−12.854
A	408	ARG	6	−10.854	−10.295
A	409	GLN	27	−9.888	−11.856
A	410	ILE	35	−14.273	−16.657
A	411	ALA	11	−14.572	−14.162
A	412	PRO	18	−10.966	−11.775
A	413	GLY	5	−6.168	−6.034

A	414	GLN	21	-6.115	-7.827	
A	415	THR	2	-4.640	-4.336	
A	416	GLY	19	-5.712	-7.240	
A	417	THR	19	-5.304	-6.879	
A	418	ILE	25	-8.565	-10.455	
A	419	ALA	17	-8.175	-9.190	
A	420	ASP	10	-5.746	-6.235	
A	421	TYR	23	-5.939	-7.901	
A	422	ASN	32	-8.427	-11.138	
A	423	TYR	31	-9.887	-12.315	
A	424	LYS	20	-9.243	-10.480	
A	425	LEU	32	-13.833	-15.922	
A	426	PRO	14	-10.296	-10.722	
A	427	ASP	0	-6.764	-5.986	
A	428	ASP	4	-10.930	-10.133	
A	429	PHE	27	-18.872	-19.806	
A	430	THR	14	-23.518	-22.424	
A	431	GLY	31	-27.742	-28.117	
A	432	CYS	27	-28.451	-28.284	
A	433	VAL	24	-26.329	-26.061	
A	434	ILE	31	-24.882	-25.586	
A	435	ALA	25	-17.834	-18.658	
A	436	TRP	20	-16.117	-16.563	
A	437	ASN	14	-9.273	-9.816	
A	438	SER	34	-8.670	-11.583	
A	439	ASN	20	-3.834	-5.693	
A	440	ASN	4	-3.385	-3.455	<=B
A	441	LEU	20	-5.250	-6.946	
A	442	ASP	34	-4.939	-8.281	
A	443	SER	23	-2.146	-4.544	
A	444	LYS	9	0.792	-0.334	<=B
A	445	VAL	1	2.403	2.011	<=B
A	446	GLY	1	2.532	2.126	<=B
A	447	GLY	9	0.701	-0.415	<=B
A	448	ASN	26	-1.743	-4.532	
A	449	TYR	5	-2.313	-2.622	<=B
A	450	ASN	18	-2.465	-4.252	
A	451	TYR	31	-6.634	-9.436	
A	452	LEU	19	-6.232	-7.700	
A	453	TYR	28	-7.122	-9.523	
A	454	ARG	30	-4.517	-7.447	
A	455	LEU	15	-4.889	-6.051	
A	456	PHE	14	-4.561	-5.647	
A	457	ARG	24	-3.149	-5.547	
A	458	LYS	10	-1.974	-2.897	<=B
A	459	SER	5	-1.295	-1.721	<=B
A	460	ASN	14	-1.923	-3.312	<=B
A	461	LEU	26	-4.221	-6.726	
A	462	LYS	1	-3.320	-3.053	<=B
A	463	PRO	11	-8.093	-8.427	

A	464	PHE	18	−11.413	−12.170	
A	465	GLU	16	−6.126	−7.261	
A	466	ARG	13	−6.280	−7.053	
A	467	ASP	29	−4.931	−7.699	
A	468	ILE	2	−4.863	−4.533	
A	469	SER	20	−3.836	−5.695	
A	470	THR	7	−4.862	−5.108	
A	471	GLU	10	−4.740	−5.345	
A	472	ILE	16	−5.655	−6.844	
A	473	TYR	18	−5.309	−6.768	
A	474	GLN	8	−4.887	−5.245	
A	475	ALA	10	−5.354	−5.888	
A	476	GLY	10	−4.079	−4.760	
A	477	SER	0	−3.374	−2.986	<=B
A	478	THR	9	−4.190	−4.743	
A	479	PRO	1	−3.764	−3.446	<=B
A	480	CYS	18	−4.505	−6.057	
A	481	ASN	0	−3.899	−3.451	<=B
A	482	GLY	5	−3.964	−4.083	
A	483	VAL	0	−5.140	−4.549	
A	484	LYS	1	−5.346	−4.846	
A	485	GLY	16	−5.402	−6.621	
A	486	PHE	2	−4.912	−4.577	
A	487	ASN	5	−5.097	−5.086	
A	488	CYS	20	−6.679	−8.210	
A	489	TYR	11	−6.237	−6.784	
A	490	PHE	9	−6.360	−6.664	
A	491	PRO	21	−5.692	−7.452	
A	492	LEU	20	−5.092	−6.807	
A	493	GLN	13	−4.729	−5.680	
A	494	SER	13	−4.165	−5.181	
A	495	TYR	34	−4.236	−7.658	
A	496	GLY	4	−1.165	−1.491	<=B
A	497	PHE	32	−2.465	−5.862	
A	498	GLN	7	−0.058	−0.856	<=B
A	499	PRO	7	0.653	−0.227	<=B
A	500	THR	3	2.043	1.463	<=B
A	501	TYR	27	1.175	−2.065	<=B
A	502	GLY	1	0.479	0.309	<=B
A	503	VAL	7	−2.781	−3.266	<=B
A	504	GLY	4	−6.373	−6.100	
A	505	TYR	9	−2.700	−3.424	<=B
A	506	GLN	17	−5.103	−6.471	
A	507	PRO	32	−7.642	−10.443	
A	508	TYR	25	−10.808	−12.440	
A	509	ARG	27	−16.054	−17.313	
A	510	VAL	37	−19.923	−21.887	
A	511	VAL	26	−25.625	−25.668	
A	512	VAL	30	−27.841	−28.090	
A	513	LEU	37	−30.503	−31.250	

A	514	SER	22	−27.418	−26.795	
A	515	PHE	38	−28.230	−29.354	
A	516	GLU	11	−24.017	−22.520	
A	517	LEU	16	−22.881	−22.090	
A	518	LEU	10	−19.043	−18.003	
A	519	HIS	7	−15.709	−14.708	
A	520	ALA	11	−15.968	−15.397	
A	521	PRO	9	−16.810	−15.912	
A	522	ALA	30	−20.647	−21.722	
A	523	THR	11	−21.135	−19.970	
A	524	VAL	27	−24.997	−25.228	
A	525	CYS	19	−23.637	−23.103	
A	526	GLY	19	−22.257	−21.883	
A	527	PRO	13	−18.027	−17.449	
A	528	LYS	13	−14.304	−14.154	
A	529	LYS	16	−15.302	−15.382	
A	530	SER	22	−13.338	−14.334	
A	531	THR	12	−11.098	−11.202	
A	532	ASN	3	−8.682	−8.028	
A	533	LEU	21	−9.259	−10.609	
A	534	VAL	16	−6.127	−7.262	
A	535	LYS	13	−8.026	−8.598	
A	536	ASN	3	−10.752	−9.860	
A	537	LYS	13	−11.857	−11.988	
A	538	CYS	19	−13.580	−14.204	
A	539	VAL	23	−12.074	−13.330	
A	540	ASN	5	−13.077	−12.148	
A	541	PHE	32	−12.730	−14.946	
A	542	ASN	17	−14.512	−14.798	
A	543	PHE	29	−13.986	−15.713	
A	544	ASN	20	−15.069	−15.636	
A	545	GLY	18	−16.682	−16.833	
A	546	LEU	20	−13.949	−14.645	
A	547	THR	9	−13.586	−13.058	
A	548	GLY	22	−13.050	−14.080	
A	549	THR	9	−13.324	−12.826	
A	550	GLY	21	−13.163	−14.064	
A	551	VAL	14	−12.723	−12.870	
A	552	LEU	27	−10.528	−12.422	
A	553	THR	15	−9.403	−10.046	
A	554	GLU	6	−6.140	−6.124	
A	555	SER	24	−5.343	−7.488	
A	556	ASN	0	−3.217	−2.847	<=B
A	557	LYS	22	−3.602	−5.718	
A	558	LYS	1	−0.983	−0.985	<=B
A	559	PHE	23	−1.705	−4.154	
A	560	LEU	1	−0.923	−0.932	<=B
A	561	PRO	0	−1.451	−1.285	<=B
A	562	PHE	0	−3.406	−3.014	<=B
A	563	GLN	13	−3.649	−4.724	

A	564	GLN	15	-8.359	-9.123	
A	565	PHE	16	-8.074	-8.985	
A	566	GLY	23	-5.606	-7.607	
A	567	ARG	6	-5.540	-5.593	
A	568	ASP	10	-4.299	-4.954	
A	569	ILE	0	-3.672	-3.249	<=B
A	570	ALA	3	-4.335	-4.181	
A	571	ASP	0	-4.253	-3.764	
A	572	THR	10	-6.271	-6.700	
A	573	THR	26	-7.636	-9.748	
A	574	ASP	11	-7.140	-7.584	
A	575	ALA	20	-7.604	-9.030	
A	576	VAL	28	-9.304	-11.454	
A	577	ARG	13	-8.121	-8.682	
A	578	ASP	22	-8.306	-9.881	
A	579	PRO	23	-9.857	-11.368	
A	580	GLN	15	-8.670	-9.398	
A	581	THR	11	-4.777	-5.493	
A	582	LEU	9	-4.079	-4.645	
A	583	GLU	12	-3.671	-4.629	
A	584	ILE	17	-5.132	-6.497	
A	585	LEU	33	-6.822	-9.833	
A	586	ASP	12	-7.941	-8.408	
A	587	ILE	25	-10.360	-12.044	
A	588	THR	17	-12.086	-12.651	
A	589	PRO	11	-13.405	-13.129	
A	590	CYS	25	-16.943	-17.870	
A	591	SER	19	-19.852	-19.754	
A	592	PHE	13	-21.481	-20.506	
A	593	GLY	23	-23.911	-23.806	
A	594	GLY	13	-24.576	-23.245	
A	595	VAL	30	-27.271	-27.584	
A	596	SER	24	-26.072	-25.833	
A	597	VAL	32	-28.482	-28.886	
A	598	ILE	33	-26.901	-27.603	
A	599	THR	28	-23.810	-24.292	
A	600	PRO	18	-17.085	-17.190	
A	601	GLY	7	-17.246	-16.068	
A	602	THR	17	-16.487	-16.546	
A	603	ASN	6	-13.077	-12.263	
A	604	THR	19	-11.190	-12.088	
A	605	SER	24	-15.257	-16.263	
A	606	ASN	11	-18.069	-17.256	
A	607	GLN	21	-20.249	-20.335	
A	608	VAL	33	-24.489	-25.467	
A	609	ALA	37	-27.234	-28.357	
A	610	VAL	32	-29.452	-29.745	
A	611	LEU	31	-28.385	-28.686	
A	612	TYR	26	-28.344	-28.074	
A	613	GLN	16	-25.320	-24.248	

A	614	GLY	11	−22.769	−21.416
A	615	VAL	28	−22.753	−23.356
A	616	ASN	4	−21.124	−19.155
A	617	CYS	18	−23.209	−22.610
A	618	THR	3	−19.287	−17.414
A	619	GLU	27	−20.846	−21.553
A	620	VAL	34	−24.343	−25.453
A	621	PRO	10	−19.235	−18.173
A	622	VAL	24	−19.038	−19.608
A	623	ALA	30	−19.930	−21.088
A	624	ILE	11	−16.836	−16.165
A	625	HIS	7	−13.906	−13.112
A	626	ALA	26	−15.059	−16.317
A	627	ASP	7	−11.624	−11.092
A	628	GLN	13	−16.087	−15.732
A	629	LEU	17	−20.067	−19.715
A	630	THR	26	−22.546	−22.944
A	631	PRO	17	−22.933	−22.250
A	632	THR	32	−24.008	−24.927
A	633	TRP	28	−25.631	−25.903
A	634	ARG	12	−20.410	−19.442
A	635	VAL	17	−19.994	−19.650
A	636	TYR	38	−24.080	−25.680
A	637	SER	16	−19.551	−19.142
A	638	THR	10	−15.358	−14.742
A	639	GLY	15	−17.802	−17.480
A	640	SER	2	−14.671	−13.214
A	641	ASN	19	−16.880	−17.124
A	642	VAL	20	−21.725	−21.527
A	643	PHE	28	−21.889	−22.592
A	644	GLN	7	−21.540	−19.868
A	645	THR	32	−21.797	−22.971
A	646	ARG	9	−19.799	−18.557
A	647	ALA	24	−21.171	−21.496
A	648	GLY	27	−23.885	−24.243
A	649	CYS	29	−24.766	−25.253
A	650	LEU	30	−27.800	−28.053
A	651	ILE	30	−26.446	−26.855
A	652	GLY	26	−23.681	−23.947
A	653	ALA	38	−20.984	−22.941
A	654	GLU	15	−16.684	−16.490
A	655	TYR	15	−16.063	−15.941
A	656	VAL	26	−13.497	−14.935
A	657	ASN	1	−10.844	−9.712
A	658	ASN	12	−9.256	−9.572
A	659	SER	9	−11.646	−11.342
A	660	TYR	19	−12.129	−12.919
A	661	GLU	3	−12.596	−11.492
A	662	CYS	14	−15.643	−15.454
A	663	ASP	21	−16.983	−17.445

A	664	ILE	29	-19.716	-20.784	
A	665	PRO	3	-18.950	-17.116	
A	666	ILE	41	-21.229	-23.503	
A	667	GLY	21	-19.578	-19.742	
A	668	ALA	12	-17.778	-17.114	
A	669	GLY	10	-16.632	-15.870	
A	670	ILE	29	-19.515	-20.606	
A	671	CYS	17	-19.603	-19.304	
A	672	ALA	37	-20.946	-22.792	
A	673	SER	16	-17.587	-17.404	
A	674	TYR	21	-14.304	-15.074	
A	675	GLN	19	-10.622	-11.586	
A	676	THR	9	-5.685	-6.066	
A	677	GLN	18	-6.299	-7.645	
A	678	THR	10	-3.277	-4.050	
A	679	ASN	1	0.117	-0.011	<=B
A	680	SER	16	0.876	-1.065	<=B
A	681	PRO	0	2.342	2.072	<=B
A	682	ARG	7	2.399	1.318	<=B
A	683	ARG	3	2.517	1.882	<=B
A	684	ALA	1	2.677	2.255	<=B
A	685	ARG	6	1.555	0.687	<=B
A	686	SER	3	1.167	0.688	<=B
A	687	VAL	6	-3.349	-3.654	<=B
A	688	ALA	6	-2.806	-3.174	<=B
A	689	SER	11	-3.627	-4.475	
A	690	GLN	16	-7.132	-8.152	
A	691	SER	22	-11.987	-13.139	
A	692	ILE	36	-17.701	-19.806	
A	693	ILE	21	-16.850	-17.327	
A	694	ALA	29	-19.000	-20.150	
A	695	TYR	22	-17.772	-18.259	
A	696	THR	7	-15.623	-14.632	
A	697	MET	16	-14.464	-14.641	
A	698	SER	10	-10.848	-10.751	
A	699	LEU	4	-9.236	-8.634	
A	700	GLY	3	-7.785	-7.235	
A	701	ALA	2	-6.097	-5.626	
A	702	GLU	5	-4.787	-4.811	
A	703	ASN	6	-2.298	-2.724	<=B
A	704	SER	1	-1.683	-1.604	<=B
A	705	VAL	8	-2.900	-3.486	<=B
A	706	ALA	10	-3.729	-4.450	
A	707	TYR	3	-4.154	-4.021	
A	708	SER	12	-5.495	-6.243	
A	709	ASN	5	-6.062	-5.940	
A	710	ASN	13	-7.055	-7.738	
A	711	SER	8	-6.222	-6.426	
A	712	ILE	24	-7.662	-9.541	
A	713	ALA	12	-3.496	-4.474	

A	714	ILE	26	-3.405	-6.003	
A	715	PRO	18	-3.965	-5.579	
A	716	THR	8	-2.997	-3.572	<=B
A	717	ASN	7	-4.043	-4.383	
A	718	PHE	36	-8.338	-11.520	
A	719	THR	13	-9.036	-9.492	
A	720	ILE	30	-13.077	-15.023	
A	721	SER	18	-18.191	-18.169	
A	722	VAL	31	-24.069	-24.866	
A	723	THR	19	-25.444	-24.703	
A	724	THR	31	-27.036	-27.492	
A	725	GLU	28	-27.412	-27.480	
A	726	ILE	22	-26.250	-25.761	
A	727	LEU	31	-26.962	-27.427	
A	728	PRO	24	-26.789	-26.468	
A	729	VAL	33	-26.821	-27.531	
A	730	SER	33	-25.516	-26.377	
A	731	MET	32	-22.714	-23.782	
A	732	THR	31	-24.465	-25.217	
A	733	LYS	21	-24.387	-23.997	
A	734	THR	35	-24.929	-26.087	
A	735	SER	15	-25.594	-24.376	
A	736	VAL	41	-28.290	-29.751	
A	737	ASP	17	-27.551	-26.338	
A	738	CYS	25	-28.806	-28.368	
A	739	THR	14	-28.015	-26.403	
A	740	MET	13	-28.253	-26.499	
A	741	TYR	33	-30.430	-30.726	
A	742	ILE	34	-29.223	-29.772	
A	743	CYS	22	-27.969	-27.283	
A	744	GLY	23	-26.534	-26.127	
A	745	ASP	6	-21.672	-19.870	
A	746	SER	28	-19.411	-20.398	
A	747	THR	3	-17.051	-15.435	
A	748	GLU	21	-17.549	-17.946	
A	749	CYS	29	-21.247	-22.139	
A	750	SER	8	-21.160	-19.647	
A	751	ASN	9	-17.057	-16.131	
A	752	LEU	28	-19.562	-20.532	
A	753	LEU	27	-22.278	-22.821	
A	754	LEU	7	-19.215	-17.810	
A	755	GLN	13	-16.366	-15.979	
A	756	TYR	27	-18.279	-19.282	
A	757	GLY	0	-16.416	-14.528	
A	758	SER	3	-16.031	-14.532	
A	759	PHE	26	-21.509	-22.026	
A	760	CYS	24	-24.342	-24.303	
A	761	THR	5	-19.982	-18.259	
A	762	GLN	13	-18.239	-17.636	
A	763	LEU	29	-22.860	-23.566	

A	764	ASN	15	-22.434	-21.579	
A	765	ARG	5	-17.812	-16.338	
A	766	ALA	22	-17.107	-17.670	
A	767	LEU	27	-21.933	-22.516	
A	768	THR	8	-18.875	-17.624	
A	769	GLY	16	-16.474	-16.419	
A	770	ILE	28	-19.110	-20.132	
A	771	ALA	18	-21.728	-21.299	
A	772	VAL	6	-17.172	-15.887	
A	773	GLU	19	-16.587	-16.864	
A	774	GLN	33	-19.445	-21.004	
A	775	ASP	17	-17.783	-17.693	
A	776	LYS	14	-15.747	-15.546	
A	777	ASN	31	-21.891	-22.939	
A	778	THR	27	-23.270	-23.699	
A	779	GLN	9	-20.828	-19.468	
A	780	GLU	21	-20.921	-20.930	
A	781	VAL	39	-26.008	-27.503	
A	782	PHE	33	-25.094	-26.003	
A	783	ALA	14	-20.150	-19.443	
A	784	GLN	34	-20.777	-22.298	
A	785	VAL	31	-17.531	-19.080	
A	786	LYS	3	-12.423	-11.339	
A	787	GLN	18	-12.403	-13.047	
A	788	ILE	11	-11.196	-11.174	
A	789	TYR	29	-13.196	-15.014	
A	790	LYS	5	-10.323	-9.711	
A	791	THR	31	-11.475	-13.720	
A	792	PRO	17	-4.762	-6.169	
A	793	PRO	0	-1.443	-1.277	<=B
A	794	ILE	3	-1.829	-1.964	<=B
A	795	LYS	13	-6.071	-6.868	
A	796	ASP	6	-6.673	-6.596	
A	797	PHE	27	-10.276	-12.199	
A	798	GLY	21	-9.289	-10.636	
A	799	GLY	17	-7.580	-8.663	
A	800	PHE	32	-13.687	-15.793	
A	801	ASN	17	-13.155	-13.597	
A	802	PHE	32	-16.750	-18.504	
A	803	SER	13	-10.976	-11.209	
A	804	GLN	24	-13.697	-14.881	
A	805	ILE	39	-20.397	-22.536	
A	806	LEU	21	-16.484	-17.004	
A	807	PRO	28	-11.994	-13.835	
A	808	ASP	14	-5.992	-6.913	
A	809	PRO	5	-1.448	-1.856	<=B
A	810	SER	4	0.936	0.368	<=B
A	811	LYS	20	-2.134	-4.189	
A	812	PRO	0	-1.495	-1.323	<=B
A	813	SER	21	-5.821	-7.567	

A	814	LYS	15	−6.901	−7.832
A	815	ARG	22	−13.554	−14.525
A	816	SER	33	−17.296	−19.102
A	817	PHE	14	−14.530	−14.469
A	818	ILE	35	−20.883	−22.506
A	819	GLU	33	−20.969	−22.352
A	820	ASP	15	−14.984	−14.986
A	821	LEU	26	−17.051	−18.080
A	822	LEU	35	−21.234	−22.817
A	823	PHE	21	−17.078	−17.529
A	824	ASN	14	−13.996	−13.996
A	825	LYS	28	−14.726	−16.252
A	826	VAL	38	−16.339	−18.830
A	827	THR	5	−18.650	−17.080
A	828	LEU	23	−22.028	−22.140
A	829	ALA	25	−22.614	−22.889
A	830	ASP	27	−21.146	−21.819
A	831	ALA	14	−20.314	−19.588
A	832	GLY	22	−17.456	−17.979
A	833	PHE	9	−13.406	−12.900
A	834	ILE	3	−13.910	−12.655
A	835	LYS	24	−13.430	−14.645
A	836	GLN	3	−9.797	−9.015
A	837	TYR	1	−11.389	−10.194
A	838	GLY	1	−8.360	−7.514
A	839	ASP	8	−10.930	−10.593
A	840	CYS	16	−15.813	−15.835
A	841	LEU	4	−12.368	−11.406
A	842	GLY	5	−8.012	−7.665
A	843	ASP	2	−8.830	−8.045
A	844	ILE	12	−12.854	−12.756
A	845	ALA	11	−15.439	−14.929
A	846	ALA	13	−15.465	−15.182
A	847	ARG	11	−17.378	−16.645
A	848	ASP	21	−18.364	−18.667
A	849	LEU	18	−21.515	−21.111
A	850	ILE	24	−22.638	−22.795
A	851	CYS	15	−20.938	−20.255
A	852	ALA	24	−24.586	−24.519
A	853	GLN	28	−26.536	−26.704
A	854	LYS	23	−26.150	−25.788
A	855	PHE	17	−26.272	−25.206
A	856	ASN	25	−29.054	−28.588
A	857	GLY	26	−28.891	−28.559
A	858	LEU	31	−29.656	−29.810
A	859	THR	18	−27.049	−26.008
A	860	VAL	29	−23.210	−23.875
A	861	LEU	19	−22.738	−22.308
A	862	PRO	11	−18.406	−17.554
A	863	PRO	28	−17.587	−18.785

A	864	LEU	18	−13.364	−13.897
A	865	LEU	29	−15.327	−16.899
A	866	THR	9	−12.962	−12.507
A	867	ASP	24	−16.076	−16.987
A	868	GLU	8	−11.919	−11.468
A	869	MET	14	−14.499	−14.442
A	870	ILE	31	−20.994	−22.145
A	871	ALA	23	−19.001	−19.461
A	872	GLN	11	−15.830	−15.275
A	873	TYR	27	−20.710	−21.433
A	874	THR	39	−23.611	−25.381
A	875	SER	23	−19.234	−19.667
A	876	ALA	22	−18.379	−18.795
A	877	LEU	37	−24.631	−26.054
A	878	LEU	32	−23.936	−24.864
A	879	ALA	25	−20.088	−20.653
A	880	GLY	35	−22.297	−23.758
A	881	THR	32	−23.982	−24.904
A	882	ILE	29	−20.512	−21.488
A	883	THR	20	−16.464	−16.870
A	884	SER	27	−17.198	−18.325
A	885	GLY	17	−20.697	−20.272
A	886	TRP	22	−21.743	−21.772
A	887	THR	15	−17.007	−16.776
A	888	PHE	31	−18.096	−19.580
A	889	GLY	25	−19.932	−20.515
A	890	ALA	13	−14.305	−14.155
A	891	GLY	4	−11.272	−10.436
A	892	ALA	2	−11.883	−10.746
A	893	ALA	22	−13.892	−14.824
A	894	LEU	11	−11.758	−11.671
A	895	GLN	10	−11.141	−11.010
A	896	ILE	19	−11.096	−12.005
A	897	PRO	11	−11.391	−11.346
A	898	PHE	26	−14.563	−15.879
A	899	ALA	19	−13.003	−13.693
A	900	MET	9	−11.248	−10.990
A	901	GLN	31	−14.065	−16.012
A	902	MET	28	−14.553	−16.100
A	903	ALA	15	−10.730	−11.221
A	904	TYR	17	−11.135	−11.809
A	905	ARG	38	−15.126	−17.756
A	906	PHE	27	−10.984	−12.826
A	907	ASN	10	−8.810	−8.947
A	908	GLY	30	−11.232	−13.390
A	909	ILE	33	−9.791	−12.460
A	910	GLY	21	−6.691	−8.337
A	911	VAL	36	−7.629	−10.891
A	912	THR	19	−3.714	−5.472
A	913	GLN	11	−5.122	−5.798

A	914	ASN	7	−1.213	−1.879	<=B
A	915	VAL	29	−3.247	−6.209	
A	916	LEU	26	−7.407	−9.545	
A	917	TYR	9	−2.638	−3.369	<=B
A	918	GLU	11	−2.041	−3.071	<=B
A	919	ASN	23	−2.782	−5.107	
A	920	GLN	19	−5.065	−6.668	
A	921	LYS	1	−4.486	−4.085	
A	922	LEU	14	−4.180	−5.309	
A	923	ILE	28	−8.952	−11.142	
A	924	ALA	20	−10.807	−11.865	
A	925	ASN	7	−7.572	−7.506	
A	926	GLN	23	−11.137	−12.501	
A	927	PHE	30	−15.068	−16.785	
A	928	ASN	12	−14.172	−13.922	
A	929	SER	11	−12.965	−12.739	
A	930	ALA	28	−17.511	−18.718	
A	931	ILE	25	−19.122	−19.798	
A	932	GLY	10	−15.621	−14.975	
A	933	LYS	14	−14.935	−14.828	
A	934	ILE	35	−19.424	−21.215	
A	935	GLN	15	−15.581	−15.514	
A	936	ASP	8	−11.795	−11.358	
A	937	SER	18	−13.968	−14.431	
A	938	LEU	30	−15.241	−16.938	
A	939	SER	8	−10.134	−9.888	
A	940	SER	6	−8.501	−8.213	
A	941	THR	10	−10.343	−10.303	
A	942	ALA	3	−10.781	−9.886	
A	943	SER	4	−14.963	−13.702	
A	944	ALA	27	−19.418	−20.290	
A	945	LEU	33	−20.639	−22.061	
A	946	GLY	7	−18.362	−17.056	
A	947	LYS	21	−20.011	−20.125	
A	948	LEU	32	−24.055	−24.968	
A	949	GLN	12	−19.210	−18.381	
A	950	ASP	15	−20.552	−19.913	
A	951	VAL	35	−21.869	−23.379	
A	952	VAL	21	−23.925	−23.588	
A	953	ASN	11	−21.884	−20.633	
A	954	GLN	23	−20.137	−20.466	
A	955	ASN	36	−24.588	−25.900	
A	956	ALA	17	−24.184	−23.358	
A	957	GLN	11	−23.764	−22.296	
A	958	ALA	29	−24.352	−24.886	
A	959	LEU	30	−26.566	−26.961	
A	960	ASN	15	−26.560	−25.231	
A	961	THR	22	−25.985	−25.526	
A	962	LEU	38	−29.442	−30.426	
A	963	VAL	20	−29.430	−28.346	

A	964	LYS	12	−26.679	−24.991
A	965	GLN	27	−25.877	−26.006
A	966	LEU	28	−27.809	−27.831
A	967	SER	11	−23.635	−22.182
A	968	SER	21	−21.134	−21.118
A	969	ASN	4	−16.897	−15.414
A	970	PHE	23	−15.844	−16.667
A	971	GLY	7	−10.999	−10.539
A	972	ALA	30	−13.728	−15.599
A	973	ILE	13	−10.341	−10.647
A	974	SER	12	−13.123	−12.994
A	975	SER	9	−20.051	−18.780
A	976	VAL	4	−20.897	−18.954
A	977	LEU	24	−21.819	−22.070
A	978	ASN	4	−18.242	−16.604
A	979	ASP	11	−12.146	−12.014
A	980	ILE	31	−14.986	−16.828
A	981	LEU	17	−13.660	−14.044
A	982	SER	7	−10.258	−9.883
A	983	ARG	12	−9.359	−9.663
A	984	LEU	20	−10.702	−11.771
A	985	ASP	1	−9.804	−8.791
A	986	LYS	2	−10.243	−9.295
A	987	VAL	0	−10.345	−9.155
A	988	GLU	10	−11.232	−11.090
A	989	ALA	20	−14.576	−15.200
A	990	GLU	7	−15.388	−14.423
A	991	VAL	6	−14.593	−13.605
A	992	GLN	22	−15.842	−16.550
A	993	ILE	31	−19.845	−21.128
A	994	ASP	10	−19.199	−18.141
A	995	ARG	18	−18.291	−18.258
A	996	LEU	35	−21.529	−23.078
A	997	ILE	23	−23.311	−23.275
A	998	THR	10	−20.763	−19.526
A	999	GLY	22	−20.871	−21.001
A	1000	ARG	34	−24.741	−25.806
A	1001	LEU	21	−25.470	−24.956
A	1002	GLN	9	−21.024	−19.641
A	1003	SER	32	−23.421	−24.408
A	1004	LEU	32	−25.907	−26.608
A	1005	GLN	10	−21.699	−20.353
A	1006	THR	19	−19.967	−19.855
A	1007	TYR	39	−22.993	−24.834
A	1008	VAL	25	−22.329	−22.636
A	1009	THR	7	−15.347	−14.387
A	1010	GLN	20	−14.947	−15.528
A	1011	GLN	39	−21.425	−23.446
A	1012	LEU	14	−16.244	−15.986
A	1013	ILE	8	−13.369	−12.751

A	1014	ARG	28	−17.617	−18.811
A	1015	ALA	22	−19.357	−19.661
A	1016	ALA	6	−15.994	−14.845
A	1017	GLU	18	−16.732	−16.878
A	1018	ILE	35	−20.751	−22.390
A	1019	ARG	13	−20.698	−19.813
A	1020	ALA	8	−17.486	−16.395
A	1021	SER	24	−22.472	−22.648
A	1022	ALA	27	−23.226	−23.660
A	1023	ASN	7	−19.477	−18.042
A	1024	LEU	21	−20.830	−20.850
A	1025	ALA	36	−25.957	−27.112
A	1026	ALA	19	−24.340	−23.726
A	1027	ILE	12	−22.257	−21.077
A	1028	LYS	35	−26.685	−27.641
A	1029	MET	35	−29.606	−30.227
A	1030	SER	11	−23.231	−21.824
A	1031	GLU	16	−23.676	−22.793
A	1032	CYS	38	−28.688	−29.759
A	1033	VAL	33	−28.949	−29.415
A	1034	LEU	25	−26.348	−26.193
A	1035	GLY	15	−24.307	−23.237
A	1036	GLN	24	−22.964	−23.083
A	1037	SER	24	−21.752	−22.011
A	1038	LYS	9	−13.451	−12.939
A	1039	ARG	16	−13.243	−13.560
A	1040	VAL	2	−12.757	−11.520
A	1041	ASP	1	−16.440	−14.664
A	1042	PHE	20	−19.470	−19.531
A	1043	CYS	33	−26.343	−27.109
A	1044	GLY	28	−24.441	−24.851
A	1045	LYS	2	−19.499	−17.487
A	1046	GLY	25	−14.752	−15.930
A	1047	TYR	21	−13.230	−14.124
A	1048	HIS	27	−20.093	−20.888
A	1049	LEU	36	−20.608	−22.378
A	1050	MET	34	−26.989	−27.795
A	1051	SER	37	−29.078	−29.989
A	1052	PHE	35	−28.725	−29.446
A	1053	PRO	42	−28.840	−30.353
A	1054	GLN	36	−25.120	−26.371
A	1055	SER	29	−25.917	−26.272
A	1056	ALA	33	−24.762	−25.709
A	1057	PRO	25	−24.153	−24.251
A	1058	HIS	38	−26.580	−27.893
A	1059	GLY	32	−26.794	−27.393
A	1060	VAL	44	−28.296	−30.102
A	1061	VAL	35	−27.375	−28.252
A	1062	PHE	36	−30.908	−31.494
A	1063	LEU	36	−29.281	−30.054

A	1064	HIS	28	−29.012	−28.895	
A	1065	VAL	36	−25.890	−27.053	
A	1066	THR	21	−20.455	−20.518	
A	1067	TYR	32	−13.407	−15.546	
A	1068	VAL	17	−10.872	−11.576	
A	1069	PRO	17	−8.168	−9.184	
A	1070	ALA	12	−6.221	−6.885	
A	1071	GLN	7	−3.313	−3.737	
A	1072	GLU	15	−3.182	−4.541	
A	1073	LYS	16	−3.004	−4.499	
A	1074	ASN	9	−2.942	−3.639	<=B
A	1075	PHE	30	−5.530	−8.344	
A	1076	THR	12	−6.596	−7.218	
A	1077	THR	25	−8.162	−10.099	
A	1078	ALA	27	−9.345	−11.375	
A	1079	PRO	12	−9.874	−10.119	
A	1080	ALA	20	−10.235	−11.358	
A	1081	ILE	30	−9.348	−11.723	
A	1082	CYS	13	−9.349	−9.769	
A	1083	HIS	22	−7.684	−9.330	
A	1084	ASP	13	−7.502	−8.134	
A	1085	GLY	0	−8.173	−7.233	
A	1086	LYS	13	−8.543	−9.055	
A	1087	ALA	15	−9.272	−9.931	
A	1088	HIS	28	−8.750	−10.964	
A	1089	PHE	13	−8.556	−9.068	
A	1090	PRO	20	−5.941	−7.558	
A	1091	ARG	11	−5.580	−6.203	
A	1092	GLU	16	−4.477	−5.802	
A	1093	GLY	30	−5.678	−8.475	
A	1094	VAL	22	−7.519	−9.184	
A	1095	PHE	33	−8.245	−11.092	
A	1096	VAL	24	−7.266	−9.191	
A	1097	SER	18	−6.228	−7.582	
A	1098	ASN	12	−3.621	−4.584	
A	1099	GLY	2	−4.125	−3.880	
A	1100	THR	0	−3.904	−3.455	<=B
A	1101	HIS	9	−3.285	−3.942	
A	1102	TRP	26	−5.484	−7.843	
A	1103	PHE	19	−4.883	−6.506	
A	1104	VAL	24	−6.147	−8.200	
A	1105	THR	26	−5.646	−7.987	
A	1106	GLN	18	−3.851	−5.478	
A	1107	ARG	13	−5.611	−6.461	
A	1108	ASN	23	−4.805	−6.897	
A	1109	PHE	22	−4.482	−6.496	
A	1110	TYR	21	−3.522	−5.532	
A	1111	GLU	20	−1.611	−3.726	
A	1112	PRO	20	−2.883	−4.852	
A	1113	GLN	23	−2.211	−4.601	

A	1114	ILE	7	-3.317	-3.741	
A	1115	ILE	31	-5.127	-8.102	
A	1116	THR	10	-5.179	-5.733	
A	1117	THR	8	-4.694	-5.074	
A	1118	ASP	8	-3.099	-3.662	<=B
A	1119	ASN	25	-5.401	-7.655	
A	1120	THR	32	-6.369	-9.316	
A	1121	PHE	4	-7.124	-6.764	
A	1122	VAL	15	-7.810	-8.637	
A	1123	SER	8	-8.294	-8.260	
A	1124	GLY	10	-8.756	-8.899	
A	1125	ASN	3	-8.641	-7.993	
A	1126	CYS	12	-10.649	-10.804	
A	1127	ASP	0	-9.610	-8.505	
A	1128	VAL	8	-9.383	-9.224	
A	1129	VAL	23	-10.698	-12.113	
A	1130	ILE	2	-10.127	-9.192	
A	1131	GLY	11	-10.187	-10.280	
A	1132	ILE	23	-10.563	-11.993	
A	1133	VAL	21	-9.501	-10.824	
A	1134	ASN	2	-8.071	-7.373	
A	1135	ASN	33	-6.901	-9.902	
A	1136	THR	4	-6.322	-6.055	
A	1137	VAL	25	-6.849	-8.937	
A	1138	TYR	14	-3.955	-5.110	
A	1139	ASP	11	-3.138	-4.042	
A	1140	PRO	8	-1.023	-1.825	<=B
A	1141	LEU	3	-0.665	-0.933	<=B
A	1142	GLN	7	-0.239	-1.017	<=B
A	1143	PRO	6	0.810	0.027	<=B
A	1144	GLU	5	0.686	0.032	<=B
A	1145	LEU	5	0.971	0.285	<=B
A	1146	ASP	6	1.982	1.064	<=B
A	1147	SER	5	1.068	0.370	<=B
A	1148	PHE	6	1.138	0.317	<=B
A	1149	LYS	6	1.732	0.843	<=B
A	1150	GLU	5	2.624	1.747	<=B
A	1151	GLU	6	2.410	1.443	<=B
A	1152	LEU	7	2.169	1.115	<=B
A	1153	ASP	6	2.851	1.833	<=B
A	1154	LYS	5	2.856	1.953	<=B
A	1155	TYR	5	2.670	1.788	<=B
A	1156	PHE	6	3.000	1.965	<=B
A	1157	LYS	6	3.276	2.209	<=B
A	1158	ASN	6	3.171	2.116	<=B
A	1159	HIS	7	2.973	1.827	<=B
A	1160	THR	5	3.207	2.263	<=B
A	1161	SER	5	3.112	2.179	<=B
A	1162	PRO	4	3.210	2.381	<=B

Identified 95 B-Cell epitope residues out of 1149 total residues