A	14	GLN	10	−16.949	−16.150
A	15	CYS	11	−17.237	−16.520
A	16	VAL	18	−14.108	−14.555
A	17	ASN	2	−12.311	−11.125
A	18	LEU	37	−13.387	−16.102
A	19	THR	4	−9.262	−8.657
A	20	THR	22	−8.210	−9.796
A	21	ARG	24	−7.901	−9.753
A	22	THR	15	−7.206	−8.102
A	23	GLN	0	−5.235	−4.633
A	24	LEU	20	−5.200	−6.902
A	25	PRO	2	−5.214	−4.845
A	26	PRO	8	−8.553	−8.489
A	27	ALA	18	−9.344	−10.339
A	28	TYR	9	−10.531	−10.355
A	29	THR	21	−12.355	−13.349
A	30	ASN	9	−14.177	−13.581
A	31	SER	31	−15.645	−17.411
A	32	PHE	14	−16.424	−16.145
A	33	THR	17	−17.635	−17.562
A	34	ARG	34	−17.412	−19.320
A	35	GLY	40	−20.235	−22.508
A	36	VAL	30	−19.702	−20.886
A	37	TYR	35	−16.256	−18.412
A	38	TYR	21	−14.471	−15.221
A	39	PRO	25	−14.510	−15.717
A	40	ASP	12	−11.019	−11.131
A	41	LYS	7	−6.719	−6.751
A	42	VAL	9	−12.037	−11.687
A	43	PHE	5	−10.924	−10.243
A	44	ARG	23	−14.427	−15.413
A	45	SER	11	−14.327	−13.944
A	46	SER	12	−15.771	−15.338
A	47	VAL	18	−18.905	−18.801
A	48	LEU	20	−19.832	−19.851
A	49	HIS	26	−19.391	−20.151
A	50	SER	16	−19.148	−18.786
A	51	THR	22	−17.722	−18.214
A	52	GLN	7	−14.985	−14.066
A	53	ASP	24	−14.210	−15.336
A	54	LEU	20	−16.600	−16.991
A	55	PHE	33	−19.626	−21.164
A	56	LEU	34	−18.785	−20.534
A	57	PRO	22	−20.547	−20.715
A	58	PHE	26	−20.739	−21.344
A	59	PHE	12	−18.811	−18.028
A	60	SER	26	−16.570	−17.655
A	61	ASN	5	−14.613	−13.508
A	62	VAL	36	−15.444	−17.808
A	63	THR	21	−13.554	−14.410

A	64	TRP	21	-14.125	-14.916	
A	65	PHE	24	-15.963	-16.887	
A	66	HIS	21	-13.998	-14.803	
A	67	ALA	33	-14.899	-16.980	
A	68	ILE	15	-9.983	-10.560	
A	69	HIS	28	-6.666	-9.119	
A	70	VAL	12	-4.181	-5.080	
A	71	SER	7	-3.614	-4.003	
A	72	GLY	1	-2.450	-2.284	<=B
A	73	THR	15	-2.255	-3.720	
A	74	ASN	11	-2.900	-3.832	
A	75	GLY	13	-4.167	-5.182	
A	76	THR	33	-6.458	-9.511	
A	77	LYS	13	-8.672	-9.170	
A	78	ARG	16	-10.941	-11.523	
A	79	PHE	27	-15.536	-16.855	
A	80	ASP	22	-17.422	-17.949	
A	81	ASN	34	-21.241	-22.708	
A	82	PRO	20	-19.206	-19.297	
A	83	VAL	18	-20.789	-20.468	
A	84	LEU	27	-20.721	-21.443	
A	85	PRO	8	-14.314	-13.588	
A	86	PHE	29	-17.259	-18.609	
A	87	ASN	3	-12.360	-11.284	
A	88	ASP	11	-13.294	-13.030	
A	89	GLY	27	-19.831	-20.655	
A	90	VAL	25	-22.082	-22.418	
A	91	TYR	39	-21.608	-23.608	
A	92	PHE	32	-24.815	-25.641	
A	93	ALA	42	-20.325	-22.818	
A	94	SER	23	-19.074	-19.525	
A	95	THR	25	-14.579	-15.777	
A	96	GLU	26	-14.152	-15.514	
A	97	LYS	22	-7.842	-9.470	
A	98	SER	29	-8.100	-10.503	
A	99	ASN	20	-14.808	-15.405	
A	100	ILE	34	-19.113	-20.825	
A	101	ILE	30	-23.936	-24.633	
A	102	ARG	37	-25.618	-26.927	
A	103	GLY	33	-29.421	-29.833	
A	104	TRP	27	-30.099	-29.742	
A	105	ILE	32	-28.857	-29.218	
A	106	PHE	35	-26.103	-27.126	
A	107	GLY	31	-22.039	-23.070	
A	108	THR	11	-15.409	-14.902	
A	109	THR	13	-13.449	-13.397	
A	110	LEU	25	-18.772	-19.488	
A	111	ASP	4	-14.128	-12.963	
A	112	SER	17	-14.964	-15.198	
A	113	LYS	7	-9.639	-9.335	

A	114	THR	13	−11.949	−12.070	
A	115	GLN	17	−15.487	−15.661	
A	116	SER	32	−20.870	−22.150	
A	117	LEU	31	−23.566	−24.421	
A	118	LEU	37	−27.549	−28.636	
A	119	ILE	23	−28.010	−27.434	
A	120	VAL	28	−28.181	−28.160	
A	121	ASN	16	−25.009	−23.973	
A	122	ASN	23	−22.569	−22.619	
A	123	ALA	16	−16.132	−16.116	
A	124	THR	7	−13.169	−12.460	
A	125	ASN	11	−18.418	−17.565	
A	126	VAL	13	−22.756	−21.634	
A	127	VAL	17	−23.221	−22.506	
A	128	ILE	17	−22.820	−22.151	
A	129	LYS	21	−22.050	−21.929	
A	130	VAL	18	−20.495	−20.208	
A	131	CYS	22	−18.904	−19.260	
A	132	GLU	6	−15.947	−14.803	
A	133	PHE	33	−19.720	−21.247	
A	134	GLN	7	−18.073	−16.799	
A	135	PHE	34	−22.022	−23.400	
A	136	CYS	22	−19.659	−19.928	
A	137	ASN	5	−16.035	−14.766	
A	138	ASP	19	−19.276	−19.244	
A	139	PRO	28	−24.884	−25.242	
A	140	PHE	29	−25.772	−26.143	
A	141	LEU	28	−22.463	−23.100	
A	142	GLY	24	−16.860	−17.681	
A	143	VAL	28	−11.203	−13.135	
A	144	TYR	9	−8.116	−8.218	
A	145	TYR	23	−4.999	−7.069	
A	146	HIS	9	−2.374	−3.136	<=B
A	147	LYS	15	−1.716	−3.244	<=B
A	148	ASN	0	0.961	0.851	<=B
A	149	ASN	10	0.202	−0.971	<=B
A	150	LYS	0	−0.006	−0.006	<=B
A	151	SER	9	−1.763	−2.595	<=B
A	152	CYS	24	−5.364	−7.507	
A	153	MET	6	−8.829	−8.504	
A	154	GLU	24	−12.107	−13.474	
A	155	SER	16	−11.569	−12.079	
A	156	GLU	30	−15.977	−17.590	
A	157	PHE	19	−21.047	−20.811	
A	158	ARG	22	−22.062	−22.055	
A	159	VAL	34	−27.056	−27.855	
A	160	TYR	31	−22.004	−23.039	
A	161	SER	11	−18.079	−17.265	
A	162	SER	10	−17.220	−16.390	
A	163	ALA	17	−18.027	−17.909	

A	164	ASN	14	−14.830	−14.734	
A	165	ASN	12	−12.667	−12.591	
A	166	CYS	16	−15.998	−15.998	
A	167	THR	14	−14.395	−14.350	
A	168	PHE	19	−15.650	−16.035	
A	169	GLU	8	−17.126	−16.077	
A	170	TYR	15	−16.652	−16.462	
A	171	VAL	9	−16.625	−15.748	
A	172	SER	18	−13.628	−14.131	
A	173	GLN	0	−10.347	−9.157	
A	174	PRO	1	−10.900	−9.762	
A	175	PHE	12	−7.511	−8.028	
A	176	LEU	7	−6.985	−6.987	
A	177	MET	19	−8.330	−9.557	
A	178	ASP	9	−7.391	−7.576	
A	179	LEU	30	−9.924	−12.233	
A	180	GLU	10	−5.807	−6.289	
A	181	GLY	20	−3.818	−5.679	
A	182	LYS	16	−2.460	−4.017	
A	183	GLN	14	−1.589	−3.016	<=B
A	184	GLY	1	−1.959	−1.849	<=B
A	185	ASN	9	−3.718	−4.325	
A	186	PHE	30	−7.411	−10.009	
A	187	LYS	9	−6.854	−7.101	
A	188	ASN	23	−11.650	−12.956	
A	189	LEU	25	−13.695	−14.995	
A	190	ARG	17	−17.243	−17.215	
A	191	GLU	33	−20.197	−21.669	
A	192	PHE	26	−23.227	−23.546	
A	193	VAL	29	−21.082	−21.992	
A	194	PHE	34	−23.673	−24.861	
A	195	LYS	25	−20.827	−21.307	
A	196	ASN	22	−13.907	−14.838	
A	197	ILE	18	−11.278	−12.051	
A	198	ASP	1	−7.009	−6.318	
A	199	GLY	3	−10.766	−9.873	
A	200	TYR	10	−13.502	−13.100	
A	201	PHE	28	−15.989	−17.370	
A	202	LYS	22	−17.566	−18.076	
A	203	ILE	22	−19.521	−19.806	
A	204	TYR	27	−17.362	−18.471	
A	205	SER	20	−16.953	−17.303	
A	206	LYS	23	−14.805	−15.748	
A	207	HIS	7	−10.967	−10.511	
A	208	THR	18	−8.066	−9.209	
A	209	PRO	0	−4.731	−4.187	
A	210	ILE	27	−5.298	−7.794	
A	211	ASN	0	−3.508	−3.105	<=B
A	212	LEU	17	−5.280	−6.628	
A	213	VAL	1	−3.890	−3.558	<=B

A	214	ARG	6	−6.302	−6.268	
A	215	ASP	10	−9.909	−9.920	
A	216	LEU	32	−13.254	−15.410	
A	217	PRO	23	−10.017	−11.510	
A	218	GLN	2	−11.789	−10.663	
A	219	GLY	17	−12.975	−13.438	
A	220	PHE	20	−14.502	−15.135	
A	221	SER	20	−13.972	−14.665	
A	222	ALA	25	−15.609	−16.689	
A	223	LEU	28	−17.260	−18.495	
A	224	GLU	8	−11.905	−11.456	
A	225	PRO	14	−12.557	−12.723	
A	226	LEU	15	−12.062	−12.400	
A	227	VAL	11	−14.374	−13.986	
A	228	ASP	9	−12.351	−11.965	
A	229	LEU	31	−15.692	−17.453	
A	230	PRO	0	−11.662	−10.321	
A	231	ILE	32	−15.905	−17.756	
A	232	GLY	7	−13.193	−12.481	
A	233	ILE	39	−15.680	−18.362	
A	234	ASN	9	−14.434	−13.809	
A	235	ILE	33	−17.637	−19.403	
A	236	THR	7	−14.483	−13.622	
A	237	ARG	13	−19.761	−18.983	
A	238	PHE	35	−24.953	−26.109	
A	239	GLN	29	−26.480	−26.770	
A	240	THR	30	−28.787	−28.926	
A	241	LEU	29	−28.490	−28.549	
A	242	LEU	34	−25.619	−26.583	
A	243	ALA	29	−20.751	−21.699	
A	244	LEU	33	−16.756	−18.624	
A	245	HIS	32	−10.827	−13.262	
A	246	ARG	19	−7.241	−8.594	
A	247	SER	18	−3.709	−5.352	
A	248	TYR	11	−2.350	−3.345	<=B
A	249	LEU	13	−3.215	−4.340	
A	250	THR	11	−2.228	−3.237	<=B
A	251	PRO	0	−0.353	−0.312	<=B
A	252	GLY	2	−2.131	−2.116	<=B
A	253	ASP	17	−4.948	−6.334	
A	254	SER	3	−6.158	−5.794	
A	255	SER	11	−8.477	−8.767	
A	256	SER	11	−8.658	−8.928	
A	257	GLY	9	−7.094	−7.313	
A	258	TRP	30	−7.403	−10.002	
A	259	THR	24	−7.498	−9.396	
A	260	ALA	28	−13.172	−14.877	
A	261	GLY	32	−11.669	−14.007	
A	262	ALA	20	−9.859	−11.025	
A	263	ALA	32	−12.532	−14.771	

A	264	ALA	24	−15.442	−16.426
A	265	TYR	34	−19.061	−20.779
A	266	TYR	32	−17.573	−19.232
A	267	VAL	26	−21.123	−21.684
A	268	GLY	31	−20.351	−21.576
A	269	TYR	14	−18.200	−17.717
A	270	LEU	30	−18.324	−19.667
A	271	GLN	22	−14.529	−15.388
A	272	PRO	7	−14.082	−13.267
A	273	ARG	31	−16.309	−17.998
A	274	THR	19	−18.133	−18.232
A	275	PHE	27	−19.612	−20.461
A	276	LEU	21	−19.663	−19.817
A	277	LEU	32	−17.747	−19.386
A	278	LYS	18	−17.008	−17.122
A	279	TYR	22	−16.294	−16.950
A	280	ASN	8	−12.026	−11.563
A	281	GLU	3	−9.997	−9.192
A	282	ASN	5	−7.341	−7.072
A	283	GLY	10	−11.372	−11.214
A	284	THR	8	−12.293	−11.800
A	285	ILE	29	−15.124	−16.720
A	286	THR	14	−13.871	−13.886
A	287	ASP	13	−15.319	−15.052
A	288	ALA	32	−18.267	−19.847
A	289	VAL	26	−19.082	−19.877
A	290	ASP	24	−21.168	−21.494
A	291	CYS	25	−22.293	−22.604
A	292	ALA	23	−25.052	−24.816
A	293	LEU	28	−23.998	−24.458
A	294	ASP	21	−24.853	−24.410
A	295	PRO	33	−25.976	−26.784
A	296	LEU	22	−26.147	−25.670
A	297	SER	23	−23.122	−23.108
A	298	GLU	26	−24.466	−24.643
A	299	THR	26	−23.744	−24.003
A	300	LYS	30	−18.637	−19.944
A	301	CYS	23	−21.096	−21.315
A	302	THR	23	−19.400	−19.814
A	303	LEU	23	−18.112	−18.674
A	304	LYS	13	−19.136	−18.431
A	305	SER	12	−19.669	−18.787
A	306	PHE	15	−17.493	−17.207
A	307	THR	5	−15.821	−14.576
A	308	VAL	30	−19.910	−21.070
A	309	GLU	7	−18.876	−17.510
A	310	LYS	18	−18.947	−18.838
A	311	GLY	11	−20.778	−19.653
A	312	ILE	29	−23.754	−24.357
A	313	TYR	27	−23.431	−23.841

A	314	GLN	8	−22.845	−21.138
A	315	THR	32	−23.423	−24.409
A	316	SER	20	−23.457	−23.059
A	317	ASN	9	−21.178	−19.777
A	318	PHE	34	−23.504	−24.711
A	319	ARG	13	−19.876	−19.086
A	320	VAL	29	−19.554	−20.640
A	321	GLN	12	−14.966	−14.625
A	322	PRO	17	−12.753	−13.242
A	323	THR	16	−10.548	−11.175
A	324	GLU	12	−10.416	−10.598
A	325	SER	8	−12.535	−12.014
A	326	ILE	27	−12.739	−14.379
A	327	VAL	17	−14.694	−14.960
A	328	ARG	31	−13.547	−15.554
A	329	PHE	26	−13.659	−15.078
A	330	PRO	21	−12.107	−13.130
A	331	ASN	5	−11.955	−11.155
A	332	ILE	25	−14.213	−15.454
A	333	THR	1	−12.128	−10.848
A	334	ASN	10	−14.184	−13.703
A	335	LEU	12	−20.836	−19.820
A	336	CYS	33	−25.133	−26.038
A	337	PRO	18	−24.658	−23.892
A	338	PHE	18	−27.398	−26.317
A	339	GLY	5	−20.433	−18.658
A	340	GLU	15	−20.035	−19.456
A	341	VAL	30	−24.042	−24.727
A	342	PHE	25	−21.682	−22.064
A	343	ASN	8	−15.755	−14.863
A	344	ALA	21	−12.347	−13.343
A	345	THR	1	−7.345	−6.615
A	346	ARG	13	−7.514	−8.145
A	347	PHE	38	−11.347	−14.412
A	348	ALA	23	−8.871	−10.496
A	349	SER	24	−5.020	−7.203
A	350	VAL	38	−7.358	−10.882
A	351	TYR	19	−5.103	−6.701
A	352	ALA	12	−5.441	−6.196
A	353	TRP	34	−8.721	−11.628
A	354	ASN	21	−12.215	−13.225
A	355	ARG	17	−19.237	−18.980
A	356	LYS	21	−22.581	−22.399
A	357	ARG	7	−22.632	−20.834
A	358	ILE	34	−25.970	−26.893
A	359	SER	11	−22.196	−20.908
A	360	ASN	0	−17.985	−15.917
A	361	CYS	20	−20.814	−20.720
A	362	VAL	12	−22.537	−21.326
A	363	ALA	31	−26.577	−27.086

A	364	ASP	13	−24.752	−23.401
A	365	TYR	30	−27.747	−28.006
A	366	SER	9	−22.290	−20.762
A	367	VAL	13	−21.676	−20.678
A	368	LEU	35	−25.148	−26.281
A	369	TYR	16	−23.308	−22.467
A	370	ASN	5	−19.118	−17.495
A	371	SER	19	−18.212	−18.303
A	372	ALA	0	−12.772	−11.303
A	373	SER	19	−12.941	−13.637
A	374	PHE	24	−17.151	−17.939
A	375	SER	17	−13.052	−13.506
A	376	THR	31	−16.131	−17.841
A	377	PHE	17	−23.458	−22.715
A	378	LYS	15	−22.480	−21.620
A	379	CYS	18	−25.239	−24.406
A	380	TYR	24	−21.328	−21.636
A	381	GLY	22	−20.980	−21.097
A	382	VAL	24	−23.122	−23.223
A	383	SER	5	−22.187	−20.211
A	384	PRO	15	−23.065	−22.137
A	385	THR	0	−21.738	−19.238
A	386	LYS	13	−22.846	−21.714
A	387	LEU	27	−25.762	−25.904
A	388	ASN	11	−23.758	−22.291
A	389	ASP	5	−20.819	−19.000
A	390	LEU	24	−23.571	−23.620
A	391	CYS	20	−24.769	−24.220
A	392	PHE	31	−25.294	−25.950
A	393	THR	11	−21.685	−20.457
A	394	ASN	6	−23.529	−21.513
A	395	VAL	31	−27.350	−27.769
A	396	TYR	13	−26.133	−24.623
A	397	ALA	28	−26.537	−26.705
A	398	ASP	26	−22.793	−23.161
A	399	SER	22	−19.217	−19.537
A	400	PHE	33	−11.943	−14.365
A	401	VAL	31	−10.194	−12.587
A	402	ILE	35	−7.471	−10.637
A	403	ARG	25	−4.884	−7.198
A	404	GLY	16	−6.073	−7.215
A	405	ASP	12	−3.349	−4.344
A	406	GLU	29	−4.207	−7.058
A	407	VAL	23	−8.868	−10.493
A	408	ARG	6	−8.868	−8.539
A	409	GLN	27	−7.155	−9.437
A	410	ILE	35	−11.908	−14.564
A	411	ALA	11	−13.003	−12.773
A	412	PRO	18	−9.627	−10.590
A	413	GLY	5	−5.462	−5.409

A	414	GLN	21	-4.385	-6.296	
A	415	THR	2	-2.611	-2.540	<=B
A	416	GLY	17	-3.229	-4.812	
A	417	LYS	18	-2.009	-3.848	
A	418	ILE	25	-5.283	-7.550	
A	419	ALA	17	-5.655	-6.960	
A	420	ASP	11	-3.292	-4.178	
A	421	TYR	23	-3.364	-5.622	
A	422	ASN	32	-5.564	-8.604	
A	423	TYR	31	-7.322	-10.045	
A	424	LYS	19	-7.143	-8.507	
A	425	LEU	32	-12.201	-14.478	
A	426	PRO	14	-9.966	-10.430	
A	427	ASP	0	-6.309	-5.583	
A	428	ASP	3	-10.604	-9.730	
A	429	PHE	27	-18.482	-19.462	
A	430	THR	14	-23.516	-22.421	
A	431	GLY	31	-27.748	-28.122	
A	432	CYS	27	-28.142	-28.010	
A	433	VAL	24	-25.050	-24.929	
A	434	ILE	31	-23.340	-24.221	
A	435	ALA	25	-15.862	-16.913	
A	436	TRP	20	-14.200	-14.867	
A	437	ASN	14	-7.129	-7.919	
A	438	SER	33	-6.672	-9.699	
A	439	ASN	19	-1.735	-3.721	
A	440	ASN	4	-1.707	-1.971	<=B
A	441	LEU	20	-3.451	-5.355	
A	442	ASP	33	-2.684	-6.171	
A	443	SER	23	0.142	-2.519	<=B
A	444	LYS	9	2.893	1.525	<=B
A	445	VAL	1	4.330	3.717	<=B
A	446	GLY	1	4.563	3.924	<=B
A	447	GLY	9	3.491	2.054	<=B
A	448	ASN	26	1.458	-1.699	<=B
A	449	TYR	5	0.800	0.133	<=B
A	450	ASN	18	0.401	-1.716	<=B
A	451	TYR	31	-2.869	-6.104	
A	452	ARG	18	-2.234	-4.047	
A	453	TYR	27	-3.425	-6.136	
A	454	ARG	30	-1.293	-4.594	
A	455	LEU	15	-2.183	-3.657	<=B
A	456	PHE	14	-2.306	-3.650	<=B
A	457	ARG	24	-1.166	-3.792	
A	458	LYS	10	-0.521	-1.611	<=B
A	459	SER	5	0.254	-0.350	<=B
A	460	ASN	14	0.059	-1.558	<=B
A	461	LEU	26	-2.219	-4.954	
A	462	LYS	1	-1.750	-1.663	<=B
A	463	PRO	11	-6.555	-7.066	

A	464	PHE	18	-9.411	-10.399	
A	465	GLU	16	-4.245	-5.597	
A	466	ARG	13	-4.056	-5.085	
A	467	ASP	28	-2.753	-5.657	
A	468	ILE	2	-2.755	-2.668	<=B
A	469	SER	20	-1.952	-4.027	
A	470	THR	7	-3.041	-3.496	<=B
A	471	GLU	10	-3.410	-4.168	
A	472	ILE	16	-4.477	-5.802	
A	473	TYR	17	-4.003	-5.497	
A	474	GLN	8	-4.105	-4.553	
A	475	ALA	11	-4.472	-5.223	
A	476	GLY	10	-4.109	-4.786	
A	477	SER	0	-3.728	-3.299	<=B
A	478	THR	9	-4.609	-5.114	
A	479	PRO	1	-4.235	-3.863	
A	480	CYS	18	-5.081	-6.567	
A	481	ASN	0	-4.467	-3.954	
A	482	GLY	5	-4.564	-4.614	
A	483	VAL	0	-4.876	-4.315	
A	484	GLU	1	-5.224	-4.739	
A	485	GLY	16	-5.432	-6.647	
A	486	PHE	2	-5.493	-5.091	
A	487	ASN	5	-4.532	-4.585	
A	488	CYS	19	-5.742	-7.267	
A	489	TYR	11	-4.714	-5.437	
A	490	PHE	9	-4.542	-5.055	
A	491	PRO	21	-3.568	-5.573	
A	492	LEU	20	-2.094	-4.153	
A	493	GLN	13	-1.454	-2.782	<=B
A	494	SER	13	-0.603	-2.029	<=B
A	495	TYR	35	-0.662	-4.611	
A	496	GLY	4	1.987	1.299	<=B
A	497	PHE	32	0.717	-3.046	<=B
A	498	GLN	7	2.618	1.512	<=B
A	499	PRO	7	2.702	1.586	<=B
A	500	THR	3	3.644	2.880	<=B
A	501	ASN	27	3.594	0.076	<=B
A	502	GLY	1	2.378	1.990	<=B
A	503	VAL	7	-0.651	-1.381	<=B
A	504	GLY	5	-3.827	-3.962	
A	505	TYR	8	0.289	-0.664	<=B
A	506	GLN	17	-2.239	-3.937	
A	507	PRO	32	-4.578	-7.732	
A	508	TYR	25	-8.019	-9.972	
A	509	ARG	27	-13.454	-15.012	
A	510	VAL	37	-17.503	-19.745	
A	511	VAL	26	-23.722	-23.984	
A	512	VAL	30	-26.337	-26.758	
A	513	LEU	37	-29.524	-30.384	

A	514	SER	22	−27.129	−26.539	
A	515	PHE	38	−28.262	−29.382	
A	516	GLU	11	−24.016	−22.520	
A	517	LEU	16	−22.889	−22.097	
A	518	LEU	10	−19.050	−18.009	
A	519	HIS	7	−15.709	−14.708	
A	520	ALA	11	−15.966	−15.395	
A	521	PRO	9	−16.801	−15.903	
A	522	ALA	30	−20.640	−21.716	
A	523	THR	11	−21.131	−19.966	
A	524	VAL	27	−24.991	−25.222	
A	525	CYS	19	−23.645	−23.111	
A	526	GLY	20	−22.243	−21.985	
A	527	PRO	13	−18.023	−17.445	
A	528	LYS	13	−14.307	−14.157	
A	529	LYS	16	−15.304	−15.384	
A	530	SER	22	−13.340	−14.336	
A	531	THR	12	−11.096	−11.200	
A	532	ASN	2	−8.681	−7.912	
A	533	LEU	21	−9.261	−10.611	
A	534	VAL	16	−6.127	−7.263	
A	535	LYS	13	−8.029	−8.601	
A	536	ASN	3	−10.754	−9.863	
A	537	LYS	13	−11.856	−11.987	
A	538	CYS	19	−13.582	−14.205	
A	539	VAL	23	−12.073	−13.329	
A	540	ASN	5	−13.076	−12.147	
A	541	PHE	32	−12.729	−14.945	
A	542	ASN	17	−14.507	−14.793	
A	543	PHE	29	−13.981	−15.708	
A	544	ASN	20	−15.067	−15.634	
A	545	GLY	18	−16.680	−16.832	
A	546	LEU	21	−13.946	−14.757	
A	547	THR	9	−13.586	−13.059	
A	548	GLY	22	−13.049	−14.078	
A	549	THR	9	−13.323	−12.826	
A	550	GLY	21	−13.163	−14.064	
A	551	VAL	14	−12.728	−12.875	
A	552	LEU	27	−10.529	−12.424	
A	553	THR	15	−9.400	−10.044	
A	554	GLU	6	−6.136	−6.121	
A	555	SER	24	−5.340	−7.486	
A	556	ASN	0	−3.216	−2.846	<=B
A	557	LYS	22	−3.600	−5.716	
A	558	LYS	1	−0.982	−0.984	<=B
A	559	PHE	23	−1.703	−4.153	
A	560	LEU	1	−0.922	−0.931	<=B
A	561	PRO	0	−1.452	−1.285	<=B
A	562	PHE	0	−3.405	−3.014	<=B
A	563	GLN	13	−3.647	−4.723	

A	564	GLN	15	-8.358	-9.122	
A	565	PHE	16	-8.075	-8.987	
A	566	GLY	23	-5.603	-7.603	
A	567	ARG	6	-5.539	-5.592	
A	568	ASP	10	-4.295	-4.951	
A	569	ILE	0	-3.670	-3.248	<=B
A	570	ALA	3	-4.335	-4.181	
A	571	ASP	0	-4.255	-3.765	
A	572	THR	10	-6.273	-6.701	
A	573	THR	26	-7.637	-9.748	
A	574	ASP	11	-7.135	-7.580	
A	575	ALA	20	-7.600	-9.026	
A	576	VAL	28	-9.301	-11.452	
A	577	ARG	13	-8.119	-8.681	
A	578	ASP	22	-8.303	-9.878	
A	579	PRO	23	-9.852	-11.364	
A	580	GLN	15	-8.668	-9.397	
A	581	THR	11	-4.774	-5.490	
A	582	LEU	9	-4.076	-4.643	
A	583	GLU	12	-3.669	-4.627	
A	584	ILE	17	-5.130	-6.495	
A	585	LEU	33	-6.819	-9.830	
A	586	ASP	11	-7.936	-8.288	
A	587	ILE	25	-10.359	-12.042	
A	588	THR	17	-12.086	-12.651	
A	589	PRO	11	-13.408	-13.131	
A	590	CYS	26	-16.948	-17.989	
A	591	SER	19	-19.858	-19.759	
A	592	PHE	13	-21.485	-20.509	
A	593	GLY	23	-23.684	-23.605	
A	594	GLY	13	-24.332	-23.028	
A	595	VAL	30	-27.245	-27.562	
A	596	SER	24	-25.678	-25.485	
A	597	VAL	32	-27.674	-28.172	
A	598	ILE	33	-26.250	-27.026	
A	599	THR	28	-23.560	-24.071	
A	600	PRO	17	-16.920	-16.930	
A	601	GLY	7	-17.207	-16.033	
A	602	THR	17	-16.486	-16.545	
A	603	ASN	6	-13.335	-12.492	
A	604	THR	19	-11.507	-12.368	
A	605	SER	24	-15.167	-16.183	
A	606	ASN	11	-18.070	-17.257	
A	607	GLN	21	-20.059	-20.167	
A	608	VAL	33	-24.768	-25.715	
A	609	ALA	37	-26.808	-27.980	
A	610	VAL	32	-28.524	-28.924	
A	611	LEU	31	-27.870	-28.230	
A	612	TYR	26	-27.899	-27.681	
A	613	GLN	16	-24.931	-23.904	

A	614	GLY	11	−22.416	−21.103
A	615	VAL	28	−22.379	−23.025
A	616	ASN	4	−20.702	−18.782
A	617	CYS	18	−22.711	−22.169
A	618	THR	3	−18.903	−17.074
A	619	GLU	27	−20.549	−21.290
A	620	VAL	33	−23.986	−25.023
A	621	PRO	10	−18.935	−17.907
A	622	VAL	23	−19.049	−19.503
A	623	ALA	30	−19.952	−21.108
A	624	ILE	11	−16.845	−16.173
A	625	HIS	7	−13.916	−13.121
A	626	ALA	26	−15.084	−16.340
A	627	ASP	7	−11.930	−11.363
A	628	GLN	14	−16.102	−15.861
A	629	LEU	17	−20.072	−19.718
A	630	THR	26	−22.551	−22.947
A	631	PRO	17	−22.931	−22.249
A	632	THR	31	−23.749	−24.583
A	633	TRP	28	−25.351	−25.655
A	634	ARG	12	−20.158	−19.220
A	635	VAL	17	−19.082	−18.843
A	636	TYR	38	−22.891	−24.629
A	637	SER	16	−18.881	−18.550
A	638	THR	10	−14.997	−14.422
A	639	GLY	15	−17.366	−17.094
A	640	SER	4	−14.400	−13.204
A	641	ASN	20	−16.524	−16.923
A	642	VAL	20	−21.159	−21.026
A	643	PHE	28	−20.660	−21.504
A	644	GLN	8	−20.851	−19.373
A	645	THR	32	−21.286	−22.518
A	646	ARG	9	−19.261	−18.081
A	647	ALA	25	−20.667	−21.165
A	648	GLY	27	−23.359	−23.777
A	649	CYS	29	−24.179	−24.733
A	650	LEU	30	−26.777	−27.147
A	651	ILE	31	−25.882	−26.471
A	652	GLY	26	−23.680	−23.946
A	653	ALA	38	−20.696	−22.686
A	654	GLU	14	−15.996	−15.766
A	655	HIS	16	−15.401	−15.470
A	656	VAL	26	−13.319	−14.778
A	657	ASN	0	−9.865	−8.731
A	658	ASN	11	−8.623	−8.897
A	659	SER	9	−10.876	−10.660
A	660	TYR	19	−11.610	−12.459
A	661	GLU	3	−12.096	−11.050
A	662	CYS	14	−14.573	−14.507
A	663	ASP	22	−16.435	−17.075

A	664	ILE	29	-18.837	-20.006	
A	665	PRO	3	-18.391	-16.621	
A	666	ILE	41	-20.609	-22.954	
A	667	GLY	22	-19.073	-19.410	
A	668	ALA	12	-17.287	-16.679	
A	669	GLY	10	-16.030	-15.336	
A	670	ILE	29	-18.823	-19.994	
A	671	CYS	17	-18.865	-18.650	
A	672	ALA	37	-20.243	-22.170	
A	673	SER	16	-17.294	-17.145	
A	674	TYR	22	-13.847	-14.784	
A	675	GLN	17	-10.154	-10.941	
A	676	THR	8	-5.316	-5.624	
A	677	GLN	19	-5.938	-7.440	
A	678	THR	12	-2.535	-3.624	<=B
A	679	ASN	2	0.061	-0.176	<=B
A	680	SER	5	2.611	1.736	<=B
A	681	PRO	0	3.122	2.763	<=B
A	682	ARG	0	3.168	2.804	<=B
A	683	ARG	9	2.489	1.168	<=B
A	684	ALA	4	1.920	1.240	<=B
A	685	ARG	0	1.614	1.428	<=B
A	686	SER	9	1.943	0.684	<=B
A	687	VAL	4	-0.052	-0.506	<=B
A	688	ALA	4	-2.215	-2.420	<=B
A	689	SER	11	-4.124	-4.914	
A	690	GLN	16	-6.797	-7.856	
A	691	SER	20	-11.560	-12.531	
A	692	ILE	36	-17.201	-19.363	
A	693	ILE	19	-16.177	-16.501	
A	694	ALA	29	-18.678	-19.865	
A	695	TYR	21	-16.770	-17.256	
A	696	THR	7	-14.942	-14.029	
A	697	MET	16	-14.091	-14.310	
A	698	SER	11	-10.281	-10.364	
A	699	LEU	4	-8.879	-8.318	
A	700	GLY	3	-7.501	-6.983	
A	701	ALA	2	-5.854	-5.411	
A	702	GLU	5	-4.782	-4.807	
A	703	ASN	6	-2.297	-2.723	<=B
A	704	SER	1	-1.683	-1.604	<=B
A	705	VAL	8	-2.898	-3.484	<=B
A	706	ALA	10	-3.947	-4.643	
A	707	TYR	3	-4.151	-4.018	
A	708	SER	12	-5.494	-6.242	
A	709	ASN	5	-6.060	-5.938	
A	710	ASN	13	-7.057	-7.740	
A	711	SER	8	-6.220	-6.425	
A	712	ILE	24	-7.661	-9.540	
A	713	ALA	12	-3.494	-4.473	

A	714	ILE	26	-3.404	-6.002	
A	715	PRO	18	-3.965	-5.579	
A	716	THR	8	-2.995	-3.571	<=B
A	717	ASN	7	-4.042	-4.382	
A	718	PHE	36	-8.337	-11.518	
A	719	THR	13	-9.033	-9.489	
A	720	ILE	30	-13.078	-15.024	
A	721	SER	18	-18.077	-18.069	
A	722	VAL	31	-23.921	-24.735	
A	723	THR	19	-25.271	-24.550	
A	724	THR	31	-26.843	-27.321	
A	725	GLU	28	-27.170	-27.266	
A	726	ILE	22	-26.015	-25.553	
A	727	LEU	31	-26.683	-27.180	
A	728	PRO	24	-26.538	-26.246	
A	729	VAL	33	-26.548	-27.290	
A	730	SER	33	-25.300	-26.185	
A	731	MET	33	-22.559	-23.760	
A	732	THR	31	-24.464	-25.216	
A	733	LYS	21	-24.386	-23.997	
A	734	THR	34	-24.929	-25.972	
A	735	SER	15	-25.593	-24.375	
A	736	VAL	40	-28.296	-29.642	
A	737	ASP	18	-27.549	-26.451	
A	738	CYS	25	-28.807	-28.369	
A	739	THR	14	-28.019	-26.407	
A	740	MET	13	-28.257	-26.502	
A	741	TYR	33	-30.438	-30.732	
A	742	ILE	34	-29.229	-29.777	
A	743	CYS	22	-27.973	-27.287	
A	744	GLY	23	-26.540	-26.133	
A	745	ASP	6	-21.678	-19.875	
A	746	SER	28	-19.418	-20.405	
A	747	THR	3	-17.052	-15.436	
A	748	GLU	21	-17.547	-17.944	
A	749	CYS	29	-21.249	-22.141	
A	750	SER	8	-21.157	-19.644	
A	751	ASN	9	-17.052	-16.126	
A	752	LEU	28	-19.560	-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	-18.281	-19.284	
A	757	GLY	0	-16.201	-14.338	
A	758	SER	3	-16.033	-14.535	
A	759	PHE	26	-21.514	-22.030	
A	760	CYS	24	-24.348	-24.308	
A	761	THR	5	-19.992	-18.268	
A	762	GLN	13	-18.239	-17.636	
A	763	LEU	29	-22.857	-23.564	

A	764	ASN	15	-22.432	-21.577	
A	765	ARG	5	-17.809	-16.336	
A	766	ALA	22	-17.109	-17.671	
A	767	LEU	27	-21.935	-22.518	
A	768	THR	8	-18.875	-17.625	
A	769	GLY	16	-16.474	-16.419	
A	770	ILE	28	-18.997	-20.032	
A	771	ALA	18	-21.630	-21.213	
A	772	VAL	6	-17.052	-15.781	
A	773	GLU	19	-16.402	-16.701	
A	774	GLN	33	-19.228	-20.812	
A	775	ASP	17	-17.598	-17.530	
A	776	LYS	14	-15.519	-15.344	
A	777	ASN	31	-21.619	-22.698	
A	778	THR	27	-23.021	-23.478	
A	779	GLN	9	-20.574	-19.243	
A	780	GLU	21	-20.608	-20.653	
A	781	VAL	39	-25.672	-27.204	
A	782	PHE	33	-24.813	-25.755	
A	783	ALA	14	-19.898	-19.220	
A	784	GLN	34	-20.504	-22.056	
A	785	VAL	31	-17.294	-18.870	
A	786	LYS	3	-12.242	-11.179	
A	787	GLN	17	-12.253	-12.799	
A	788	ILE	11	-11.067	-11.059	
A	789	TYR	29	-13.070	-14.902	
A	790	LYS	5	-10.317	-9.705	
A	791	THR	31	-11.464	-13.711	
A	792	PRO	17	-4.765	-6.172	
A	793	PRO	0	-1.447	-1.281	<=B
A	794	ILE	3	-1.829	-1.964	<=B
A	795	LYS	13	-6.073	-6.869	
A	796	ASP	6	-6.675	-6.598	
A	797	PHE	27	-10.278	-12.201	
A	798	GLY	21	-9.283	-10.631	
A	799	GLY	17	-7.586	-8.668	
A	800	PHE	32	-13.691	-15.797	
A	801	ASN	17	-13.157	-13.599	
A	802	PHE	32	-16.762	-18.515	
A	803	SER	13	-10.982	-11.214	
A	804	GLN	25	-13.703	-15.002	
A	805	ILE	39	-20.287	-22.439	
A	806	LEU	21	-16.490	-17.009	
A	807	PRO	28	-11.996	-13.837	
A	808	ASP	14	-5.994	-6.914	
A	809	PRO	5	-1.449	-1.858	<=B
A	810	SER	4	0.937	0.369	<=B
A	811	LYS	20	-2.131	-4.186	
A	812	PRO	0	-1.496	-1.324	<=B
A	813	SER	21	-6.037	-7.757	

A	814	LYS	15	−6.893	−7.825
A	815	ARG	22	−13.552	−14.524
A	816	SER	34	−17.283	−19.205
A	817	PHE	14	−14.532	−14.471
A	818	ILE	35	−20.888	−22.511
A	819	GLU	33	−20.826	−22.226
A	820	ASP	15	−14.993	−14.993
A	821	LEU	26	−17.055	−18.084
A	822	LEU	35	−21.129	−22.724
A	823	PHE	21	−17.073	−17.525
A	824	ASN	14	−13.993	−13.994
A	825	LYS	29	−14.717	−16.360
A	826	VAL	38	−16.340	−18.830
A	827	THR	5	−18.641	−17.072
A	828	LEU	23	−22.021	−22.134
A	829	ALA	25	−22.612	−22.887
A	830	ASP	27	−21.140	−21.814
A	831	ALA	14	−20.303	−19.578
A	832	GLY	23	−17.227	−17.891
A	833	PHE	9	−13.411	−12.904
A	834	ILE	3	−13.908	−12.654
A	835	LYS	24	−13.427	−14.642
A	836	GLN	3	−9.795	−9.014
A	837	TYR	1	−11.397	−10.201
A	838	GLY	1	−8.356	−7.510
A	839	ASP	8	−10.927	−10.590
A	840	CYS	16	−15.823	−15.844
A	841	LEU	4	−12.373	−11.410
A	842	GLY	5	−8.006	−7.660
A	843	ASP	2	−8.834	−8.048
A	844	ILE	12	−12.864	−12.764
A	845	ALA	10	−15.444	−14.818
A	846	ALA	13	−15.477	−15.193
A	847	ARG	11	−17.376	−16.643
A	848	ASP	20	−18.349	−18.539
A	849	LEU	18	−21.515	−21.111
A	850	ILE	24	−22.636	−22.793
A	851	CYS	15	−20.942	−20.258
A	852	ALA	24	−24.594	−24.526
A	853	GLN	28	−26.542	−26.709
A	854	LYS	23	−26.155	−25.792
A	855	PHE	17	−26.276	−25.209
A	856	ASN	25	−29.061	−28.594
A	857	GLY	26	−28.897	−28.564
A	858	LEU	30	−29.663	−29.701
A	859	THR	18	−27.055	−26.014
A	860	VAL	29	−23.213	−23.878
A	861	LEU	19	−22.963	−22.507
A	862	PRO	11	−18.405	−17.554
A	863	PRO	28	−17.487	−18.696

A	864	LEU	18	−13.257	−13.803
A	865	LEU	29	−15.200	−16.787
A	866	THR	8	−12.963	−12.392
A	867	ASP	24	−15.971	−16.895
A	868	GLU	8	−11.934	−11.482
A	869	MET	14	−14.380	−14.337
A	870	ILE	31	−20.822	−21.992
A	871	ALA	23	−18.855	−19.332
A	872	GLN	11	−15.696	−15.156
A	873	TYR	27	−20.509	−21.255
A	874	THR	39	−23.404	−25.198
A	875	SER	23	−19.076	−19.528
A	876	ALA	22	−18.251	−18.682
A	877	LEU	36	−24.400	−25.734
A	878	LEU	32	−23.737	−24.687
A	879	ALA	25	−19.940	−20.522
A	880	GLY	35	−22.114	−23.596
A	881	THR	32	−23.778	−24.724
A	882	ILE	29	−20.371	−21.363
A	883	THR	19	−16.354	−16.658
A	884	SER	27	−16.819	−17.990
A	885	GLY	17	−20.527	−20.122
A	886	TRP	22	−21.519	−21.574
A	887	THR	15	−16.522	−16.347
A	888	PHE	31	−17.899	−19.406
A	889	GLY	25	−19.688	−20.299
A	890	ALA	13	−14.087	−13.962
A	891	GLY	4	−11.111	−10.293
A	892	ALA	2	−11.764	−10.641
A	893	ALA	22	−13.767	−14.714
A	894	LEU	11	−11.758	−11.671
A	895	GLN	10	−11.140	−11.009
A	896	ILE	19	−11.091	−12.001
A	897	PRO	11	−11.386	−11.342
A	898	PHE	26	−14.566	−15.881
A	899	ALA	19	−13.000	−13.690
A	900	MET	9	−11.244	−10.986
A	901	GLN	31	−13.892	−15.859
A	902	MET	28	−14.552	−16.099
A	903	ALA	15	−10.727	−11.218
A	904	TYR	17	−11.035	−11.721
A	905	ARG	38	−14.978	−17.626
A	906	PHE	27	−10.982	−12.824
A	907	ASN	10	−8.807	−8.944
A	908	GLY	30	−11.071	−13.248
A	909	ILE	33	−9.655	−12.339
A	910	GLY	21	−6.687	−8.333
A	911	VAL	36	−7.626	−10.889
A	912	THR	19	−3.715	−5.473
A	913	GLN	11	−5.125	−5.801

A	914	ASN	7	−1.214	−1.879	<=B
A	915	VAL	29	−3.247	−6.208	
A	916	LEU	26	−7.404	−9.543	
A	917	TYR	9	−2.636	−3.368	<=B
A	918	GLU	11	−2.042	−3.072	<=B
A	919	ASN	23	−2.784	−5.109	
A	920	GLN	19	−5.070	−6.672	
A	921	LYS	1	−4.488	−4.087	
A	922	LEU	14	−4.181	−5.310	
A	923	ILE	28	−8.952	−11.143	
A	924	ALA	20	−10.808	−11.866	
A	925	ASN	7	−7.571	−7.505	
A	926	GLN	23	−11.137	−12.501	
A	927	PHE	30	−15.071	−16.787	
A	928	ASN	12	−14.172	−13.922	
A	929	SER	11	−12.964	−12.738	
A	930	ALA	28	−17.511	−18.717	
A	931	ILE	25	−19.120	−19.796	
A	932	GLY	10	−15.617	−14.971	
A	933	LYS	14	−14.934	−14.827	
A	934	ILE	35	−19.426	−21.217	
A	935	GLN	15	−15.579	−15.512	
A	936	ASP	8	−11.798	−11.361	
A	937	SER	18	−13.971	−14.434	
A	938	LEU	30	−15.236	−16.934	
A	939	SER	8	−10.132	−9.887	
A	940	SER	6	−8.499	−8.211	
A	941	THR	10	−10.344	−10.304	
A	942	ALA	3	−10.777	−9.882	
A	943	SER	4	−14.964	−13.703	
A	944	ALA	27	−19.421	−20.292	
A	945	LEU	33	−20.515	−21.951	
A	946	GLY	7	−18.264	−16.968	
A	947	LYS	21	−19.443	−19.622	
A	948	LEU	32	−23.895	−24.827	
A	949	GLN	12	−19.207	−18.378	
A	950	ASP	15	−20.548	−19.910	
A	951	VAL	35	−21.743	−23.267	
A	952	VAL	22	−23.923	−23.702	
A	953	ASN	11	−21.882	−20.631	
A	954	GLN	23	−20.136	−20.465	
A	955	ASN	36	−24.589	−25.902	
A	956	ALA	17	−24.186	−23.360	
A	957	GLN	11	−23.764	−22.296	
A	958	ALA	29	−24.352	−24.886	
A	959	LEU	30	−26.574	−26.968	
A	960	ASN	15	−26.567	−25.237	
A	961	THR	20	−25.992	−25.303	
A	962	LEU	38	−29.452	−30.435	
A	963	VAL	20	−29.393	−28.313	

A	964	LYS	12	−26.661	−24.975
A	965	GLN	27	−25.883	−26.011
A	966	LEU	28	−27.815	−27.836
A	967	SER	11	−23.642	−22.188
A	968	SER	21	−21.135	−21.120
A	969	ASN	4	−16.897	−15.414
A	970	PHE	23	−15.851	−16.673
A	971	GLY	7	−10.999	−10.540
A	972	ALA	30	−13.735	−15.605
A	973	ILE	13	−10.337	−10.643
A	974	SER	12	−13.120	−12.991
A	975	SER	10	−20.061	−18.904
A	976	VAL	4	−20.897	−18.954
A	977	LEU	24	−21.822	−22.073
A	978	ASN	4	−18.248	−16.609
A	979	ASP	11	−12.149	−12.017
A	980	ILE	31	−14.990	−16.831
A	981	LEU	17	−13.663	−14.047
A	982	SER	7	−10.260	−9.885
A	983	ARG	12	−9.366	−9.669
A	984	LEU	20	−10.706	−11.775
A	985	ASP	1	−9.812	−8.799
A	986	LYS	2	−10.237	−9.290
A	987	VAL	0	−10.343	−9.154
A	988	GLU	10	−11.234	−11.092
A	989	ALA	20	−14.578	−15.202
A	990	GLU	7	−15.380	−14.416
A	991	VAL	6	−14.588	−13.600
A	992	GLN	22	−15.841	−16.549
A	993	ILE	31	−19.846	−21.129
A	994	ASP	10	−19.218	−18.158
A	995	ARG	18	−18.296	−18.262
A	996	LEU	35	−21.529	−23.078
A	997	ILE	23	−23.309	−23.273
A	998	THR	10	−20.755	−19.518
A	999	GLY	22	−20.867	−20.998
A	1000	ARG	34	−24.742	−25.807
A	1001	LEU	21	−25.468	−24.954
A	1002	GLN	9	−21.021	−19.639
A	1003	SER	32	−23.427	−24.413
A	1004	LEU	32	−25.912	−26.612
A	1005	GLN	10	−21.701	−20.355
A	1006	THR	19	−19.970	−19.858
A	1007	TYR	39	−22.990	−24.831
A	1008	VAL	25	−22.328	−22.636
A	1009	THR	7	−15.349	−14.389
A	1010	GLN	20	−14.908	−15.494
A	1011	GLN	39	−21.424	−23.446
A	1012	LEU	14	−16.245	−15.987
A	1013	ILE	8	−13.266	−12.660

A	1014	ARG	28	−17.486	−18.695
A	1015	ALA	22	−19.195	−19.517
A	1016	ALA	6	−15.803	−14.675
A	1017	GLU	18	−16.524	−16.694
A	1018	ILE	35	−20.519	−22.185
A	1019	ARG	13	−20.432	−19.577
A	1020	ALA	8	−17.192	−16.135
A	1021	SER	24	−22.167	−22.378
A	1022	ALA	27	−22.886	−23.359
A	1023	ASN	7	−19.079	−17.690
A	1024	LEU	21	−20.426	−20.492
A	1025	ALA	35	−25.566	−26.651
A	1026	ALA	19	−23.942	−23.374
A	1027	THR	12	−21.771	−20.647
A	1028	LYS	35	−26.236	−27.244
A	1029	MET	34	−29.220	−29.770
A	1030	SER	12	−22.829	−21.584
A	1031	GLU	16	−23.304	−22.464
A	1032	CYS	38	−28.346	−29.456
A	1033	VAL	33	−28.635	−29.137
A	1034	LEU	25	−26.041	−25.921
A	1035	GLY	15	−23.946	−22.918
A	1036	GLN	24	−22.698	−22.848
A	1037	SER	25	−21.466	−21.873
A	1038	LYS	9	−13.209	−12.725
A	1039	ARG	16	−13.006	−13.351
A	1040	VAL	2	−12.536	−11.324
A	1041	ASP	1	−16.221	−14.470
A	1042	PHE	21	−19.185	−19.394
A	1043	CYS	33	−26.043	−26.843
A	1044	GLY	28	−24.188	−24.627
A	1045	LYS	2	−19.299	−17.309
A	1046	GLY	26	−14.602	−15.913
A	1047	TYR	21	−13.059	−13.972
A	1048	HIS	27	−19.871	−20.691
A	1049	LEU	36	−20.407	−22.200
A	1050	MET	34	−26.754	−27.587
A	1051	SER	37	−28.816	−29.757
A	1052	PHE	35	−28.487	−29.236
A	1053	PRO	42	−28.581	−30.124
A	1054	GLN	36	−24.905	−26.181
A	1055	SER	30	−25.724	−26.216
A	1056	ALA	33	−24.591	−25.558
A	1057	PRO	25	−24.006	−24.120
A	1058	HIS	38	−26.395	−27.730
A	1059	GLY	32	−26.559	−27.185
A	1060	VAL	44	−28.030	−29.866
A	1061	VAL	35	−27.082	−27.992
A	1062	PHE	36	−30.639	−31.255
A	1063	LEU	36	−29.062	−29.860

A	1064	HIS	28	−28.775	−28.686	
A	1065	VAL	36	−25.700	−26.885	
A	1066	THR	21	−20.591	−20.638	
A	1067	TYR	32	−13.296	−15.447	
A	1068	VAL	17	−10.874	−11.578	
A	1069	PRO	17	−8.169	−9.184	
A	1070	ALA	12	−6.216	−6.881	
A	1071	GLN	6	−3.310	−3.619	<=B
A	1072	GLU	15	−3.178	−4.537	
A	1073	LYS	16	−3.003	−4.498	
A	1074	ASN	9	−2.940	−3.637	<=B
A	1075	PHE	30	−5.527	−8.341	
A	1076	THR	12	−6.595	−7.217	
A	1077	THR	25	−8.165	−10.101	
A	1078	ALA	27	−9.348	−11.378	
A	1079	PRO	12	−9.876	−10.121	
A	1080	ALA	20	−10.237	−11.360	
A	1081	ILE	30	−9.351	−11.726	
A	1082	CYS	13	−9.350	−9.770	
A	1083	HIS	23	−7.683	−9.444	
A	1084	ASP	13	−7.504	−8.136	
A	1085	GLY	0	−8.176	−7.236	
A	1086	LYS	13	−8.546	−9.058	
A	1087	ALA	15	−9.276	−9.934	
A	1088	HIS	29	−8.756	−11.084	
A	1089	PHE	13	−8.558	−9.068	
A	1090	PRO	20	−5.941	−7.558	
A	1091	ARG	11	−5.581	−6.205	
A	1092	GLU	16	−4.256	−5.607	
A	1093	GLY	31	−5.683	−8.594	
A	1094	VAL	22	−7.523	−9.188	
A	1095	PHE	33	−8.248	−11.095	
A	1096	VAL	24	−7.267	−9.191	
A	1097	SER	18	−6.228	−7.582	
A	1098	ASN	12	−3.619	−4.583	
A	1099	GLY	2	−4.128	−3.883	
A	1100	THR	0	−3.894	−3.446	<=B
A	1101	HIS	9	−2.982	−3.674	<=B
A	1102	TRP	26	−5.482	−7.842	
A	1103	PHE	19	−4.886	−6.509	
A	1104	VAL	24	−6.154	−8.206	
A	1105	THR	26	−5.647	−7.988	
A	1106	GLN	18	−3.849	−5.477	
A	1107	ARG	13	−5.609	−6.459	
A	1108	ASN	23	−4.802	−6.895	
A	1109	PHE	22	−4.481	−6.496	
A	1110	TYR	21	−3.522	−5.532	
A	1111	GLU	20	−1.611	−3.726	
A	1112	PRO	20	−2.888	−4.856	
A	1113	GLN	23	−2.216	−4.606	

A	1114	ILE	7	-3.319	-3.743	
A	1115	ILE	31	-5.128	-8.104	
A	1116	THR	10	-5.183	-5.737	
A	1117	THR	8	-4.704	-5.083	
A	1118	ASP	8	-3.106	-3.669	<=B
A	1119	ASN	26	-5.408	-7.776	
A	1120	THR	32	-6.377	-9.324	
A	1121	PHE	4	-7.126	-6.766	
A	1122	VAL	15	-7.814	-8.640	
A	1123	SER	8	-8.298	-8.264	
A	1124	GLY	9	-8.754	-8.783	
A	1125	ASN	3	-8.641	-7.992	
A	1126	CYS	12	-10.652	-10.807	
A	1127	ASP	0	-9.605	-8.501	
A	1128	VAL	8	-9.388	-9.228	
A	1129	VAL	23	-10.702	-12.116	
A	1130	ILE	2	-10.128	-9.193	
A	1131	GLY	11	-10.187	-10.281	
A	1132	ILE	23	-10.566	-11.996	
A	1133	VAL	21	-9.502	-10.824	
A	1134	ASN	2	-8.070	-7.372	
A	1135	ASN	33	-6.901	-9.903	
A	1136	THR	4	-6.328	-6.060	
A	1137	VAL	25	-6.853	-8.940	
A	1138	TYR	14	-3.955	-5.110	
A	1139	ASP	11	-3.139	-4.043	
A	1140	PRO	8	-1.025	-1.827	<=B
A	1141	LEU	3	-0.666	-0.934	<=B
A	1142	GLN	7	-0.240	-1.017	<=B
A	1143	PRO	6	0.810	0.027	<=B
A	1144	GLU	5	0.684	0.031	<=B
A	1145	LEU	5	0.972	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	1.137	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	2.408	1.441	<=B
A	1152	LEU	7	2.170	1.116	<=B
A	1153	ASP	6	2.852	1.834	<=B
A	1154	LYS	5	2.857	1.954	<=B
A	1155	TYR	5	2.673	1.790	<=B
A	1156	PHE	6	3.000	1.965	<=B
A	1157	LYS	6	3.276	2.210	<=B
A	1158	ASN	6	3.171	2.117	<=B
A	1159	HIS	7	2.974	1.827	<=B
A	1160	THR	5	3.207	2.263	<=B
A	1161	SER	5	3.112	2.180	<=B
A	1162	PRO	4	3.211	2.381	<=B

Identified 102 B-Cell epitope residues out of 1149 total residues