

A	14	GLN	10	-15.771	-15.108
A	15	CYS	11	-16.976	-16.289
A	16	VAL	18	-14.182	-14.621
A	17	ASN	2	-12.048	-10.893
A	18	LEU	37	-12.388	-15.219
A	19	THR	4	-8.909	-8.344
A	20	THR	22	-7.464	-9.136
A	21	ARG	24	-7.386	-9.297
A	22	THR	17	-6.971	-8.125
A	23	GLN	0	-5.042	-4.462
A	24	LEU	19	-5.017	-6.625
A	25	PRO	2	-4.464	-4.181
A	26	PRO	8	-8.487	-8.431
A	27	ALA	19	-9.233	-10.356
A	28	TYR	9	-10.222	-10.081
A	29	THR	21	-12.646	-13.607
A	30	ASN	9	-14.151	-13.559
A	31	SER	31	-15.485	-17.269
A	32	PHE	14	-16.207	-15.953
A	33	THR	17	-17.632	-17.559
A	34	ARG	34	-17.419	-19.326
A	35	GLY	40	-20.229	-22.502
A	36	VAL	30	-19.693	-20.878
A	37	TYR	36	-16.253	-18.524
A	38	TYR	21	-14.474	-15.224
A	39	PRO	25	-14.569	-15.768
A	40	ASP	12	-11.340	-11.416
A	41	LYS	7	-7.080	-7.071
A	42	VAL	9	-12.442	-12.047
A	43	PHE	5	-11.207	-10.493
A	44	ARG	22	-14.424	-15.295
A	45	SER	12	-14.324	-14.057
A	46	SER	12	-15.770	-15.337
A	47	VAL	18	-18.909	-18.804
A	48	LEU	20	-19.833	-19.852
A	49	HIS	26	-19.388	-20.148
A	50	SER	16	-19.159	-18.796
A	51	THR	22	-17.721	-18.213
A	52	GLN	6	-14.982	-13.949
A	53	ASP	23	-14.209	-15.220
A	54	LEU	20	-16.590	-16.982
A	55	PHE	33	-19.619	-21.158
A	56	LEU	34	-18.780	-20.531
A	57	PRO	22	-20.543	-20.710
A	58	PHE	27	-20.963	-21.657
A	59	PHE	12	-19.112	-18.294
A	60	SER	26	-16.566	-17.651
A	61	ASN	5	-14.585	-13.483
A	62	VAL	36	-15.433	-17.798
A	63	THR	21	-13.850	-14.672

A	64	TRP	20	-14.052	-14.736	
A	65	PHE	23	-15.933	-16.746	
A	66	HIS	21	-13.131	-14.036	
A	67	ALA	32	-12.862	-15.063	
A	68	ILE	14	-8.197	-8.864	
A	69	SER	28	-4.782	-7.452	
A	70	GLY	4	-1.396	-1.696	<=B
A	71	THR	0	-0.756	-0.669	<=B
A	72	ASN	5	-1.064	-1.517	<=B
A	73	GLY	16	-2.462	-4.019	
A	74	THR	34	-5.013	-8.346	
A	75	LYS	11	-6.939	-7.406	
A	76	ARG	16	-9.653	-10.382	
A	77	PHE	29	-14.115	-15.827	
A	78	ASP	23	-17.097	-17.776	
A	79	ASN	35	-21.018	-22.626	
A	80	PRO	20	-19.253	-19.339	
A	81	VAL	18	-21.083	-20.728	
A	82	LEU	27	-20.695	-21.420	
A	83	PRO	8	-13.949	-13.265	
A	84	PHE	29	-17.248	-18.600	
A	85	ASN	3	-12.254	-11.190	
A	86	ASP	11	-13.275	-13.013	
A	87	GLY	27	-19.809	-20.636	
A	88	VAL	25	-22.062	-22.400	
A	89	TYR	39	-21.453	-23.471	
A	90	PHE	32	-24.641	-25.487	
A	91	ALA	42	-20.591	-23.053	
A	92	SER	23	-18.261	-18.806	
A	93	THR	26	-13.796	-15.200	
A	94	GLU	26	-12.595	-14.137	
A	95	LYS	22	-5.964	-7.808	
A	96	SER	29	-5.921	-8.575	
A	97	ASN	20	-12.806	-13.634	
A	98	ILE	34	-17.107	-19.050	
A	99	ILE	29	-22.177	-22.961	
A	100	ARG	37	-23.994	-25.490	
A	101	GLY	33	-28.642	-29.144	
A	102	TRP	26	-30.336	-29.837	
A	103	ILE	32	-28.826	-29.191	
A	104	PHE	35	-26.078	-27.104	
A	105	GLY	30	-21.992	-22.913	
A	106	THR	11	-15.399	-14.894	
A	107	THR	13	-13.428	-13.379	
A	108	LEU	25	-18.409	-19.167	
A	109	ASP	4	-14.158	-12.990	
A	110	SER	17	-14.942	-15.179	
A	111	LYS	7	-9.626	-9.324	
A	112	THR	13	-11.933	-12.056	
A	113	GLN	17	-15.479	-15.654	

A	114	SER	32	-20.864	-22.145	
A	115	LEU	30	-23.551	-24.293	
A	116	LEU	37	-27.585	-28.668	
A	117	ILE	23	-27.982	-27.409	
A	118	VAL	28	-26.806	-26.943	
A	119	ASN	16	-22.965	-22.164	
A	120	ASN	23	-20.632	-20.904	
A	121	ALA	16	-14.141	-14.355	
A	122	THR	7	-11.306	-10.811	
A	123	ASN	11	-16.788	-16.123	
A	124	VAL	13	-21.119	-20.186	
A	125	VAL	17	-22.434	-21.809	
A	126	ILE	17	-22.806	-22.138	
A	127	LYS	21	-22.045	-21.925	
A	128	VAL	18	-20.481	-20.196	
A	129	CYS	22	-18.903	-19.260	
A	130	GLU	6	-15.933	-14.791	
A	131	PHE	33	-19.707	-21.236	
A	132	GLN	7	-18.055	-16.783	
A	133	PHE	33	-22.021	-23.284	
A	134	CYS	21	-19.666	-19.820	
A	135	ASN	5	-16.305	-15.005	
A	136	ASP	18	-19.079	-18.955	
A	137	PRO	28	-24.035	-24.491	
A	138	PHE	29	-24.058	-24.627	
A	139	LEU	29	-20.535	-21.508	
A	140	GLY	23	-14.559	-15.530	
A	141	VAL	28	-8.449	-10.697	
A	142	TYR	8	-4.952	-5.303	
A	143	HIS	26	-1.887	-4.660	
A	144	LYS	10	0.266	-0.915	<=B
A	145	ASN	15	0.985	-0.853	<=B
A	146	ASN	0	2.903	2.569	<=B
A	147	LYS	7	1.916	0.891	<=B
A	148	SER	9	0.759	-0.363	<=B
A	149	TRP	25	-2.336	-4.942	
A	150	MET	5	-5.472	-5.418	
A	151	GLU	24	-9.524	-11.189	
A	152	SER	17	-9.594	-10.446	
A	153	GLU	28	-14.331	-15.903	
A	154	PHE	19	-19.565	-19.500	
A	155	ARG	22	-20.798	-20.936	
A	156	VAL	34	-26.145	-27.048	
A	157	TYR	31	-21.999	-23.034	
A	158	SER	11	-18.088	-17.273	
A	159	SER	10	-17.196	-16.369	
A	160	ALA	18	-18.020	-18.018	
A	161	ASN	14	-14.840	-14.743	
A	162	ASN	12	-12.685	-12.606	
A	163	CYS	16	-16.005	-16.004	

A	164	THR	14	-14.397	-14.351	
A	165	PHE	19	-15.649	-16.035	
A	166	GLU	8	-17.121	-16.072	
A	167	TYR	15	-16.513	-16.339	
A	168	VAL	9	-16.626	-15.749	
A	169	SER	18	-13.695	-14.190	
A	170	GLN	0	-9.633	-8.525	
A	171	PRO	1	-9.757	-8.750	
A	172	PHE	12	-6.087	-6.767	
A	173	LEU	6	-5.006	-5.120	
A	174	MET	20	-6.745	-8.269	
A	175	ASP	8	-5.497	-5.785	
A	176	LEU	29	-7.196	-9.704	
A	177	GLU	9	-3.104	-3.782	
A	178	GLY	19	-1.558	-3.564	<=B
A	179	LYS	13	-0.392	-1.842	<=B
A	180	GLN	14	0.027	-1.586	<=B
A	181	GLY	2	-0.670	-0.823	<=B
A	182	ASN	9	-2.508	-3.254	<=B
A	183	PHE	29	-6.120	-8.752	
A	184	LYS	9	-5.802	-6.170	
A	185	ASN	23	-10.350	-11.804	
A	186	LEU	25	-14.019	-15.282	
A	187	ARG	17	-17.508	-17.449	
A	188	GLU	33	-20.156	-21.633	
A	189	PHE	26	-23.212	-23.533	
A	190	VAL	29	-21.072	-21.983	
A	191	PHE	34	-23.673	-24.860	
A	192	LYS	25	-20.818	-21.299	
A	193	ASN	22	-13.898	-14.829	
A	194	ILE	18	-11.269	-12.043	
A	195	ASP	1	-6.994	-6.305	
A	196	GLY	3	-10.715	-9.827	
A	197	TYR	10	-13.491	-13.090	
A	198	PHE	29	-15.975	-17.473	
A	199	LYS	22	-17.561	-18.072	
A	200	ILE	22	-19.437	-19.732	
A	201	TYR	27	-17.356	-18.465	
A	202	SER	20	-16.952	-17.303	
A	203	LYS	23	-14.831	-15.771	
A	204	HIS	7	-10.949	-10.495	
A	205	THR	18	-8.046	-9.190	
A	206	PRO	0	-4.482	-3.967	
A	207	ILE	27	-5.568	-8.033	
A	208	ASN	0	-3.420	-3.027	<=B
A	209	LEU	17	-5.141	-6.505	
A	210	VAL	1	-3.827	-3.502	<=B
A	211	ARG	5	-6.206	-6.068	
A	212	ASP	10	-9.758	-9.785	
A	213	LEU	32	-13.195	-15.358	

A	214	PRO	23	-10.274	-11.737	
A	215	GLN	1	-11.769	-10.531	
A	216	GLY	17	-12.959	-13.424	
A	217	PHE	20	-14.494	-15.127	
A	218	SER	19	-13.951	-14.532	
A	219	ALA	25	-15.605	-16.686	
A	220	LEU	28	-17.254	-18.490	
A	221	GLU	7	-11.906	-11.342	
A	222	PRO	14	-12.555	-12.721	
A	223	LEU	15	-12.061	-12.399	
A	224	VAL	11	-14.383	-13.994	
A	225	ASP	10	-12.364	-12.092	
A	226	LEU	31	-15.700	-17.459	
A	227	PRO	0	-11.670	-10.328	
A	228	ILE	32	-15.913	-17.763	
A	229	GLY	7	-13.214	-12.499	
A	230	ILE	38	-15.695	-18.260	
A	231	ASN	9	-14.194	-13.596	
A	232	ILE	33	-17.641	-19.408	
A	233	THR	7	-14.485	-13.624	
A	234	ARG	13	-19.764	-18.986	
A	235	PHE	35	-24.922	-26.081	
A	236	GLN	29	-26.865	-27.111	
A	237	THR	30	-27.940	-28.177	
A	238	LEU	29	-27.301	-27.497	
A	239	LEU	34	-23.657	-24.847	
A	240	ALA	29	-18.498	-19.706	
A	241	LEU	32	-14.142	-16.196	
A	242	HIS	33	-8.006	-10.880	
A	243	ARG	18	-4.720	-6.248	
A	244	SER	16	-1.406	-3.084	<=B
A	245	TYR	8	-0.463	-1.330	<=B
A	246	LEU	13	-1.830	-3.115	<=B
A	247	THR	11	-0.742	-1.921	<=B
A	248	PRO	0	0.202	0.179	<=B
A	249	GLY	2	-1.644	-1.685	<=B
A	250	ASP	18	-3.509	-5.176	
A	251	SER	4	-4.597	-4.528	
A	252	SER	11	-6.695	-7.190	
A	253	SER	11	-7.070	-7.522	
A	254	GLY	9	-5.329	-5.751	
A	255	TRP	29	-5.599	-8.290	
A	256	THR	23	-4.495	-6.623	
A	257	ALA	29	-10.874	-12.959	
A	258	GLY	32	-9.507	-12.094	
A	259	ALA	16	-8.089	-8.998	
A	260	ALA	32	-11.044	-13.454	
A	261	ALA	24	-14.588	-15.670	
A	262	TYR	34	-19.277	-20.970	
A	263	TYR	31	-17.571	-19.115	

A	264	VAL	26	-21.391	-21.921
A	265	GLY	31	-20.336	-21.563
A	266	TYR	14	-18.187	-17.705
A	267	LEU	30	-18.319	-19.662
A	268	GLN	22	-14.520	-15.380
A	269	PRO	6	-14.073	-13.145
A	270	ARG	31	-16.281	-17.974
A	271	THR	19	-18.139	-18.238
A	272	PHE	27	-19.621	-20.469
A	273	LEU	21	-19.435	-19.615
A	274	LEU	32	-17.745	-19.384
A	275	LYS	18	-17.011	-17.125
A	276	TYR	22	-16.293	-16.949
A	277	ASN	8	-12.018	-11.556
A	278	GLU	3	-10.002	-9.197
A	279	ASN	5	-7.332	-7.064
A	280	GLY	10	-11.359	-11.203
A	281	THR	8	-12.289	-11.796
A	282	ILE	29	-15.125	-16.721
A	283	THR	12	-13.901	-13.682
A	284	ASP	13	-15.324	-15.057
A	285	ALA	32	-18.072	-19.674
A	286	VAL	26	-19.222	-20.002
A	287	ASP	25	-21.168	-21.608
A	288	CYS	25	-22.294	-22.605
A	289	ALA	23	-25.047	-24.811
A	290	LEU	28	-23.786	-24.271
A	291	ASP	21	-24.897	-24.448
A	292	PRO	32	-26.316	-26.969
A	293	LEU	22	-26.198	-25.716
A	294	SER	23	-23.501	-23.444
A	295	GLU	26	-24.459	-24.636
A	296	THR	26	-23.521	-23.806
A	297	LYS	30	-18.640	-19.947
A	298	CYS	23	-21.109	-21.327
A	299	THR	23	-19.401	-19.815
A	300	LEU	23	-18.122	-18.683
A	301	LYS	13	-19.145	-18.438
A	302	SER	12	-19.673	-18.790
A	303	PHE	15	-17.804	-17.482
A	304	THR	5	-16.036	-14.767
A	305	VAL	29	-19.977	-21.014
A	306	GLU	6	-18.699	-17.239
A	307	LYS	18	-18.605	-18.535
A	308	GLY	10	-20.558	-19.344
A	309	ILE	29	-24.048	-24.618
A	310	TYR	27	-23.421	-23.833
A	311	GLN	8	-23.143	-21.402
A	312	THR	32	-23.430	-24.415
A	313	SER	20	-23.417	-23.024

A	314	ASN	9	-21.186	-19.785
A	315	PHE	34	-23.509	-24.715
A	316	ARG	13	-20.130	-19.310
A	317	VAL	29	-19.558	-20.644
A	318	GLN	12	-14.959	-14.619
A	319	PRO	18	-12.751	-13.354
A	320	THR	16	-10.554	-11.180
A	321	GLU	12	-10.417	-10.599
A	322	SER	8	-12.533	-12.012
A	323	ILE	27	-12.738	-14.378
A	324	VAL	17	-14.689	-14.954
A	325	ARG	31	-13.541	-15.548
A	326	PHE	25	-13.645	-14.951
A	327	PRO	21	-12.100	-13.124
A	328	ASN	5	-11.952	-11.152
A	329	ILE	25	-14.204	-15.446
A	330	THR	1	-12.121	-10.842
A	331	ASN	10	-14.178	-13.697
A	332	LEU	12	-20.834	-19.818
A	333	CYS	33	-25.141	-26.045
A	334	PRO	19	-24.979	-24.291
A	335	PHE	18	-27.403	-26.321
A	336	GLY	5	-20.420	-18.647
A	337	GLU	15	-20.696	-20.041
A	338	VAL	30	-24.910	-25.495
A	339	PHE	25	-22.583	-22.861
A	340	ASN	8	-16.832	-15.816
A	341	ALA	21	-13.615	-14.464
A	342	THR	1	-8.799	-7.902
A	343	ARG	13	-9.675	-10.057
A	344	PHE	38	-13.493	-16.311
A	345	ALA	23	-11.272	-12.621
A	346	SER	24	-7.882	-9.735
A	347	VAL	39	-9.991	-13.327
A	348	TYR	19	-7.448	-8.776
A	349	ALA	11	-7.525	-7.924
A	350	TRP	34	-10.654	-13.339
A	351	ASN	21	-14.128	-14.918
A	352	ARG	17	-20.729	-20.300
A	353	LYS	22	-23.524	-23.349
A	354	ARG	7	-22.647	-20.848
A	355	ILE	34	-25.975	-26.897
A	356	SER	9	-22.206	-20.687
A	357	ASN	0	-17.750	-15.709
A	358	CYS	20	-20.823	-20.728
A	359	VAL	12	-22.295	-21.111
A	360	ALA	31	-26.575	-27.084
A	361	ASP	14	-24.764	-23.526
A	362	TYR	30	-27.746	-28.005
A	363	SER	9	-22.293	-20.764

A	364	VAL	13	-21.682	-20.683	
A	365	LEU	34	-25.161	-26.177	
A	366	TYR	16	-23.262	-22.427	
A	367	ASN	5	-19.111	-17.488	
A	368	SER	19	-18.203	-18.294	
A	369	ALA	0	-13.076	-11.572	
A	370	SER	20	-13.360	-14.123	
A	371	PHE	24	-17.557	-18.298	
A	372	SER	17	-13.532	-13.930	
A	373	THR	31	-17.154	-18.746	
A	374	PHE	17	-23.478	-22.733	
A	375	LYS	15	-22.466	-21.608	
A	376	CYS	18	-25.238	-24.406	
A	377	TYR	24	-21.314	-21.623	
A	378	GLY	23	-20.982	-21.214	
A	379	VAL	24	-23.130	-23.230	
A	380	SER	5	-22.204	-20.226	
A	381	PRO	15	-23.073	-22.144	
A	382	THR	0	-21.738	-19.238	
A	383	LYS	13	-22.843	-21.711	
A	384	LEU	27	-25.815	-25.951	
A	385	ASN	11	-23.778	-22.309	
A	386	ASP	5	-20.848	-19.026	
A	387	LEU	24	-23.570	-23.619	
A	388	CYS	19	-24.772	-24.109	
A	389	PHE	31	-25.303	-25.958	
A	390	THR	11	-21.689	-20.460	
A	391	ASN	6	-23.516	-21.501	
A	392	VAL	31	-27.343	-27.764	
A	393	TYR	13	-26.752	-25.170	
A	394	ALA	28	-27.449	-27.512	
A	395	ASP	26	-24.086	-24.306	
A	396	SER	22	-20.765	-20.907	
A	397	PHE	33	-14.239	-16.397	
A	398	VAL	31	-12.794	-14.888	
A	399	ILE	35	-10.133	-12.993	
A	400	ARG	24	-7.430	-9.335	
A	401	GLY	16	-8.199	-9.096	
A	402	ASP	12	-5.344	-6.109	
A	403	GLU	29	-6.302	-8.913	
A	404	VAL	23	-10.768	-12.175	
A	405	ARG	6	-10.058	-9.591	
A	406	GLN	27	-8.955	-11.030	
A	407	ILE	35	-13.464	-15.941	
A	408	ALA	11	-13.901	-13.567	
A	409	PRO	18	-10.313	-11.197	
A	410	GLY	6	-5.471	-5.532	
A	411	GLN	21	-5.228	-7.042	
A	412	THR	2	-3.416	-3.253	<=B
A	413	GLY	17	-4.534	-5.968	

A	414	LYS	18	-3.927	-5.546	
A	415	ILE	25	-7.400	-9.424	
A	416	ALA	17	-7.065	-8.208	
A	417	ASP	11	-4.631	-5.363	
A	418	TYR	23	-5.030	-7.097	
A	419	ASN	32	-7.433	-10.258	
A	420	TYR	31	-8.969	-11.502	
A	421	LYS	20	-8.372	-9.709	
A	422	LEU	32	-13.143	-15.311	
A	423	PRO	14	-9.986	-10.448	
A	424	ASP	0	-6.307	-5.582	
A	425	ASP	3	-10.620	-9.744	
A	426	PHE	27	-18.485	-19.464	
A	427	THR	14	-23.504	-22.411	
A	428	GLY	32	-27.748	-28.237	
A	429	CYS	27	-28.142	-28.011	
A	430	VAL	24	-25.882	-25.666	
A	431	ILE	31	-24.512	-25.259	
A	432	ALA	25	-17.400	-18.274	
A	433	TRP	20	-15.793	-16.276	
A	434	ASN	14	-8.960	-9.540	
A	435	SER	34	-8.668	-11.581	
A	436	ASN	19	-3.841	-5.585	
A	437	ASN	4	-3.389	-3.459	<=B
A	438	LEU	20	-5.246	-6.942	
A	439	ASP	33	-4.918	-8.148	
A	440	SER	23	-2.150	-4.548	
A	441	LYS	9	0.785	-0.340	<=B
A	442	VAL	1	2.401	2.010	<=B
A	443	GLY	2	2.535	2.013	<=B
A	444	GLY	9	1.021	-0.132	<=B
A	445	ASN	26	-1.386	-4.216	
A	446	TYR	5	-2.009	-2.353	<=B
A	447	ASN	18	-2.162	-3.983	
A	448	TYR	31	-6.005	-8.880	
A	449	LEU	19	-5.698	-7.228	
A	450	TYR	27	-6.402	-8.770	
A	451	ARG	30	-3.787	-6.801	
A	452	LEU	15	-4.139	-5.388	
A	453	PHE	14	-3.933	-5.090	
A	454	ARG	24	-2.568	-5.032	
A	455	LYS	10	-1.510	-2.486	<=B
A	456	SER	5	-0.712	-1.205	<=B
A	457	ASN	14	-1.000	-2.495	<=B
A	458	LEU	26	-3.369	-5.972	
A	459	LYS	1	-2.614	-2.428	<=B
A	460	PRO	12	-7.424	-7.950	
A	461	PHE	18	-10.799	-11.627	
A	462	GLU	16	-5.473	-6.684	
A	463	ARG	12	-5.623	-6.356	

A	464	ASP	27	-4.431	-7.027	
A	465	ILE	2	-4.525	-4.234	
A	466	SER	20	-3.589	-5.476	
A	467	THR	7	-4.745	-5.005	
A	468	GLU	10	-4.749	-5.353	
A	469	ILE	16	-5.720	-6.902	
A	470	TYR	17	-4.962	-6.346	
A	471	GLN	8	-4.881	-5.240	
A	472	ALA	11	-5.235	-5.898	
A	473	GLY	10	-4.106	-4.784	
A	474	SER	0	-3.728	-3.299	<=B
A	475	THR	9	-4.608	-5.113	
A	476	PRO	1	-4.241	-3.868	
A	477	CYS	18	-5.084	-6.569	
A	478	ASN	0	-4.469	-3.955	
A	479	GLY	5	-4.534	-4.587	
A	480	VAL	0	-5.796	-5.129	
A	481	GLU	1	-6.142	-5.551	
A	482	GLY	16	-6.104	-7.242	
A	483	PHE	2	-5.492	-5.091	
A	484	ASN	5	-5.227	-5.201	
A	485	CYS	20	-6.755	-8.278	
A	486	TYR	11	-6.204	-6.756	
A	487	PHE	9	-6.257	-6.572	
A	488	PRO	21	-5.472	-7.258	
A	489	LEU	21	-4.647	-6.528	
A	490	GLN	13	-4.257	-5.263	
A	491	SER	13	-3.691	-4.761	
A	492	TYR	34	-3.691	-7.177	
A	493	GLY	4	-0.625	-1.014	<=B
A	494	PHE	32	-2.005	-5.455	
A	495	GLN	7	0.223	-0.608	<=B
A	496	PRO	7	0.649	-0.231	<=B
A	497	THR	3	2.040	1.460	<=B
A	498	TYR	27	1.079	-2.150	<=B
A	499	GLY	1	0.477	0.307	<=B
A	500	VAL	7	-2.462	-2.984	<=B
A	501	GLY	4	-5.873	-5.657	
A	502	TYR	9	-2.124	-2.915	<=B
A	503	GLN	17	-4.709	-6.123	
A	504	PRO	32	-7.163	-10.020	
A	505	TYR	25	-10.281	-11.974	
A	506	ARG	27	-15.572	-16.886	
A	507	VAL	37	-19.392	-21.417	
A	508	VAL	26	-25.203	-25.294	
A	509	VAL	30	-27.398	-27.698	
A	510	LEU	37	-30.222	-31.001	
A	511	SER	22	-26.893	-26.330	
A	512	PHE	38	-28.269	-29.388	
A	513	GLU	11	-24.022	-22.525	

A	514	LEU	16	-22.919	-22.123	
A	515	LEU	10	-19.082	-18.037	
A	516	HIS	6	-15.503	-14.410	
A	517	ALA	11	-15.279	-14.787	
A	518	PRO	9	-16.319	-15.477	
A	519	ALA	30	-20.756	-21.819	
A	520	THR	11	-21.123	-19.959	
A	521	VAL	27	-24.983	-25.215	
A	522	CYS	19	-23.636	-23.103	
A	523	GLY	19	-22.238	-21.865	
A	524	PRO	12	-18.014	-17.323	
A	525	LYS	13	-14.297	-14.148	
A	526	LYS	16	-15.256	-15.342	
A	527	SER	21	-13.332	-14.214	
A	528	THR	12	-11.090	-11.195	
A	529	ASN	2	-8.678	-7.910	
A	530	LEU	21	-9.266	-10.616	
A	531	VAL	16	-6.123	-7.259	
A	532	LYS	13	-8.030	-8.602	
A	533	ASN	3	-10.769	-9.875	
A	534	LYS	13	-11.854	-11.986	
A	535	CYS	19	-13.583	-14.206	
A	536	VAL	23	-12.067	-13.324	
A	537	ASN	5	-13.313	-12.357	
A	538	PHE	32	-12.446	-14.694	
A	539	ASN	17	-13.994	-14.340	
A	540	PHE	28	-13.400	-15.079	
A	541	ASN	20	-14.754	-15.358	
A	542	GLY	18	-16.166	-16.377	
A	543	LEU	21	-13.381	-14.257	
A	544	THR	9	-13.238	-12.751	
A	545	GLY	22	-12.201	-13.328	
A	546	THR	9	-12.568	-12.158	
A	547	GLY	21	-12.375	-13.367	
A	548	VAL	14	-12.076	-12.297	
A	549	LEU	27	-9.912	-11.877	
A	550	THR	15	-9.076	-9.757	
A	551	GLU	6	-5.668	-5.706	
A	552	SER	25	-4.695	-7.030	
A	553	ASN	0	-2.643	-2.339	<=B
A	554	LYS	22	-2.792	-5.001	
A	555	LYS	1	-0.363	-0.436	<=B
A	556	PHE	23	-1.009	-3.538	<=B
A	557	LEU	1	-0.413	-0.481	<=B
A	558	PRO	0	-1.466	-1.298	<=B
A	559	PHE	0	-2.945	-2.606	<=B
A	560	GLN	13	-2.897	-4.059	
A	561	GLN	14	-7.564	-8.304	
A	562	PHE	16	-7.005	-8.040	
A	563	GLY	23	-4.323	-6.471	

A	564	ARG	6	-3.959	-4.194	
A	565	ASP	11	-2.530	-3.504	<=B
A	566	ILE	0	-1.759	-1.556	<=B
A	567	ASP	0	-2.285	-2.022	<=B
A	568	ASP	0	-2.058	-1.821	<=B
A	569	THR	10	-4.506	-5.138	
A	570	THR	26	-6.149	-8.432	
A	571	ASP	11	-5.718	-6.326	
A	572	ALA	20	-6.455	-8.012	
A	573	VAL	28	-8.377	-10.634	
A	574	ARG	14	-7.465	-8.217	
A	575	ASP	21	-8.298	-9.758	
A	576	PRO	23	-9.854	-11.366	
A	577	GLN	15	-8.665	-9.393	
A	578	THR	10	-4.777	-5.378	
A	579	LEU	9	-4.080	-4.646	
A	580	GLU	12	-3.675	-4.633	
A	581	ILE	17	-4.518	-5.953	
A	582	LEU	34	-6.205	-9.402	
A	583	ASP	11	-7.009	-7.468	
A	584	ILE	25	-9.322	-11.125	
A	585	THR	17	-11.050	-11.735	
A	586	PRO	10	-12.208	-11.954	
A	587	CYS	25	-16.245	-17.252	
A	588	SER	19	-19.250	-19.221	
A	589	PHE	13	-21.232	-20.285	
A	590	GLY	23	-23.127	-23.112	
A	591	GLY	13	-24.350	-23.045	
A	592	VAL	29	-27.261	-27.461	
A	593	SER	24	-25.712	-25.515	
A	594	VAL	32	-27.997	-28.457	
A	595	ILE	33	-25.553	-26.409	
A	596	THR	27	-22.567	-23.076	
A	597	PRO	18	-16.016	-16.245	
A	598	GLY	6	-16.539	-15.327	
A	599	THR	17	-16.178	-16.273	
A	600	ASN	6	-12.448	-11.707	
A	601	THR	20	-10.522	-11.612	
A	602	SER	25	-14.777	-15.952	
A	603	ASN	11	-17.915	-17.120	
A	604	GLN	20	-19.766	-19.793	
A	605	VAL	33	-24.020	-25.053	
A	606	ALA	37	-25.931	-27.204	
A	607	VAL	32	-28.845	-29.207	
A	608	LEU	31	-27.865	-28.226	
A	609	TYR	26	-27.692	-27.498	
A	610	GLN	16	-24.954	-23.924	
A	611	GLY	11	-21.891	-20.638	
A	612	VAL	28	-22.435	-23.075	
A	613	ASN	4	-21.285	-19.297	

A	614	CYS	18	-22.677	-22.139
A	615	THR	2	-19.284	-17.296
A	616	GLU	28	-20.573	-21.427
A	617	VAL	33	-23.975	-25.013
A	618	PRO	10	-18.935	-17.908
A	619	VAL	24	-19.426	-19.952
A	620	ALA	29	-19.968	-21.007
A	621	ILE	10	-16.846	-16.058
A	622	HIS	7	-13.900	-13.106
A	623	ALA	25	-14.880	-16.044
A	624	ASP	6	-11.628	-10.981
A	625	GLN	14	-16.326	-16.059
A	626	LEU	17	-20.085	-19.730
A	627	THR	26	-22.671	-23.054
A	628	PRO	18	-22.851	-22.293
A	629	THR	33	-23.745	-24.810
A	630	TRP	29	-25.325	-25.747
A	631	ARG	12	-20.448	-19.477
A	632	VAL	17	-19.628	-19.325
A	633	TYR	38	-23.522	-25.187
A	634	SER	16	-19.095	-18.739
A	635	THR	10	-15.370	-14.752
A	636	GLY	15	-17.784	-17.464
A	637	SER	2	-14.499	-13.061
A	638	ASN	18	-16.707	-16.856
A	639	VAL	20	-20.721	-20.638
A	640	PHE	28	-20.811	-21.638
A	641	GLN	7	-20.828	-19.238
A	642	THR	31	-21.058	-22.201
A	643	ARG	9	-19.278	-18.096
A	644	ALA	25	-20.688	-21.184
A	645	GLY	26	-23.298	-23.609
A	646	CYS	29	-24.157	-24.714
A	647	LEU	31	-27.074	-27.526
A	648	ILE	30	-25.823	-26.303
A	649	GLY	26	-23.284	-23.596
A	650	ALA	38	-20.348	-22.378
A	651	GLU	13	-15.668	-15.362
A	652	HIS	17	-14.730	-14.991
A	653	VAL	26	-12.819	-14.335
A	654	ASN	1	-9.010	-8.089
A	655	ASN	13	-7.888	-8.476
A	656	SER	9	-9.462	-9.409
A	657	TYR	20	-10.023	-11.170
A	658	GLU	2	-10.364	-9.403
A	659	CYS	14	-13.667	-13.706
A	660	ASP	21	-15.086	-15.766
A	661	ILE	29	-18.279	-19.512
A	662	PRO	3	-18.383	-16.614
A	663	ILE	41	-20.597	-22.944

A	664	GLY	22	-19.080	-19.415	
A	665	ALA	13	-17.305	-16.810	
A	666	GLY	10	-16.341	-15.611	
A	667	ILE	29	-18.832	-20.001	
A	668	CYS	17	-17.757	-17.670	
A	669	ALA	37	-19.224	-21.268	
A	670	SER	16	-16.341	-16.302	
A	671	TYR	23	-13.193	-14.321	
A	672	GLN	21	-9.400	-10.734	
A	673	THR	11	-4.611	-5.346	
A	674	GLN	13	-5.608	-6.458	
A	675	THR	4	-1.905	-2.146	<=B
A	676	ASN	0	0.655	0.580	<=B
A	677	SER	1	2.811	2.372	<=B
A	678	HIS	13	0.635	-0.933	<=B
A	679	ARG	8	1.113	0.065	<=B
A	680	ARG	4	3.122	2.303	<=B
A	681	ALA	6	2.246	1.297	<=B
A	682	ARG	4	1.042	0.463	<=B
A	683	SER	8	1.960	0.814	<=B
A	684	VAL	4	-1.131	-1.461	<=B
A	685	ALA	1	-2.522	-2.347	<=B
A	686	SER	11	-4.035	-4.836	
A	687	GLN	19	-6.823	-8.223	
A	688	SER	19	-11.183	-12.082	
A	689	ILE	36	-16.755	-18.968	
A	690	ILE	21	-15.584	-16.207	
A	691	ALA	29	-17.905	-19.181	
A	692	TYR	20	-15.464	-15.986	
A	693	THR	6	-14.576	-13.590	
A	694	MET	16	-13.484	-13.773	
A	695	SER	11	-9.737	-9.882	
A	696	LEU	4	-8.887	-8.325	
A	697	GLY	3	-7.498	-6.981	
A	698	ALA	2	-5.853	-5.410	
A	699	GLU	5	-4.746	-4.775	
A	700	ASN	5	-2.401	-2.700	<=B
A	701	SER	1	-1.776	-1.687	<=B
A	702	VAL	8	-3.038	-3.608	<=B
A	703	ALA	10	-4.110	-4.788	
A	704	TYR	3	-4.293	-4.144	
A	705	SER	12	-5.618	-6.352	
A	706	ASN	5	-6.162	-6.029	
A	707	ASN	14	-7.207	-7.988	
A	708	SER	8	-6.419	-6.601	
A	709	ILE	23	-7.916	-9.651	
A	710	ALA	11	-3.801	-4.629	
A	711	ILE	26	-3.766	-6.323	
A	712	PRO	19	-4.367	-6.050	
A	713	ILE	8	-3.465	-3.987	

A	714	ASN	6	-4.457	-4.635
A	715	PHE	36	-8.697	-11.837
A	716	THR	13	-9.325	-9.748
A	717	ILE	30	-13.288	-15.210
A	718	SER	18	-18.250	-18.221
A	719	VAL	31	-24.036	-24.837
A	720	THR	19	-25.270	-24.549
A	721	THR	31	-26.851	-27.329
A	722	GLU	28	-27.174	-27.269
A	723	ILE	22	-26.251	-25.763
A	724	LEU	30	-26.675	-27.057
A	725	PRO	24	-26.537	-26.245
A	726	VAL	33	-26.552	-27.293
A	727	SER	33	-25.298	-26.184
A	728	MET	34	-22.556	-23.872
A	729	THR	31	-24.465	-25.217
A	730	LYS	21	-24.169	-23.805
A	731	THR	34	-25.158	-26.175
A	732	SER	15	-25.595	-24.376
A	733	VAL	39	-28.441	-29.656
A	734	ASP	18	-27.555	-26.456
A	735	CYS	25	-28.804	-28.367
A	736	THR	14	-28.414	-26.756
A	737	MET	13	-28.707	-26.901
A	738	TYR	33	-30.862	-31.108
A	739	ILE	34	-29.735	-30.226
A	740	CYS	22	-28.622	-27.861
A	741	GLY	23	-27.346	-26.846
A	742	ASP	6	-22.388	-20.503
A	743	SER	28	-20.224	-21.118
A	744	THR	3	-17.765	-16.067
A	745	GLU	21	-18.338	-18.645
A	746	CYS	29	-21.968	-22.776
A	747	SER	9	-21.720	-20.257
A	748	ASN	9	-17.560	-16.576
A	749	LEU	28	-20.087	-20.997
A	750	LEU	27	-22.705	-23.199
A	751	LEU	7	-19.507	-18.068
A	752	GLN	13	-16.358	-15.972
A	753	TYR	27	-18.280	-19.283
A	754	GLY	0	-16.191	-14.329
A	755	SER	3	-16.032	-14.533
A	756	PHE	26	-21.520	-22.035
A	757	CYS	24	-24.358	-24.317
A	758	THR	5	-20.005	-18.280
A	759	GLN	13	-18.237	-17.635
A	760	LEU	29	-22.849	-23.556
A	761	ASN	15	-22.649	-21.769
A	762	ARG	5	-17.796	-16.325
A	763	ALA	22	-17.105	-17.668

A	764	LEU	27	-21.933	-22.516	
A	765	THR	8	-18.874	-17.624	
A	766	GLY	16	-16.475	-16.420	
A	767	ILE	28	-18.998	-20.033	
A	768	ALA	18	-21.630	-21.213	
A	769	VAL	6	-17.054	-15.783	
A	770	GLU	19	-16.404	-16.702	
A	771	GLN	33	-19.180	-20.769	
A	772	ASP	17	-17.599	-17.530	
A	773	LYS	14	-15.752	-15.550	
A	774	ASN	31	-21.615	-22.695	
A	775	THR	27	-23.027	-23.484	
A	776	GLN	9	-20.569	-19.239	
A	777	GLU	21	-20.607	-20.653	
A	778	VAL	39	-25.672	-27.205	
A	779	PHE	33	-24.866	-25.801	
A	780	ALA	14	-19.906	-19.227	
A	781	GLN	34	-20.528	-22.077	
A	782	VAL	31	-17.285	-18.862	
A	783	LYS	4	-12.240	-11.292	
A	784	GLN	17	-12.240	-12.787	
A	785	ILE	11	-11.057	-11.051	
A	786	TYR	29	-13.063	-14.896	
A	787	LYS	6	-10.299	-9.804	
A	788	THR	28	-11.450	-13.353	
A	789	PRO	17	-4.769	-6.176	
A	790	PRO	0	-1.755	-1.553	<=B
A	791	ILE	3	-1.832	-1.966	<=B
A	792	LYS	13	-6.081	-6.877	
A	793	ASP	6	-6.683	-6.605	
A	794	PHE	28	-10.571	-12.576	
A	795	GLY	20	-9.275	-10.508	
A	796	GLY	17	-7.604	-8.685	
A	797	PHE	31	-13.701	-15.691	
A	798	ASN	17	-13.168	-13.609	
A	799	PHE	32	-16.777	-18.527	
A	800	SER	13	-10.995	-11.226	
A	801	GLN	25	-13.710	-15.008	
A	802	ILE	39	-20.289	-22.441	
A	803	LEU	21	-16.496	-17.014	
A	804	PRO	28	-11.996	-13.836	
A	805	ASP	14	-5.994	-6.915	
A	806	PRO	5	-1.442	-1.852	<=B
A	807	SER	4	0.935	0.368	<=B
A	808	LYS	20	-2.124	-4.180	
A	809	PRO	0	-1.495	-1.323	<=B
A	810	SER	22	-6.174	-7.994	
A	811	LYS	15	-6.879	-7.813	
A	812	ARG	23	-13.759	-14.822	
A	813	SER	33	-17.248	-19.059	

A	814	PHE	14	-14.537	-14.475
A	815	ILE	35	-20.897	-22.518
A	816	GLU	33	-20.840	-22.239
A	817	ASP	15	-15.012	-15.010
A	818	LEU	26	-17.066	-18.094
A	819	LEU	36	-20.761	-22.514
A	820	PHE	21	-17.069	-17.521
A	821	ASN	14	-13.995	-13.996
A	822	LYS	29	-14.713	-16.356
A	823	VAL	38	-16.341	-18.831
A	824	THR	5	-18.630	-17.062
A	825	LEU	23	-22.014	-22.128
A	826	ALA	24	-22.616	-22.775
A	827	ASP	28	-21.166	-21.952
A	828	ALA	14	-20.282	-19.560
A	829	GLY	23	-17.232	-17.895
A	830	PHE	9	-13.420	-12.911
A	831	ILE	3	-13.904	-12.650
A	832	LYS	24	-13.677	-14.864
A	833	GLN	3	-9.793	-9.012
A	834	TYR	1	-11.406	-10.210
A	835	GLY	1	-8.354	-7.508
A	836	ASP	8	-10.927	-10.590
A	837	CYS	16	-15.850	-15.867
A	838	LEU	4	-12.388	-11.424
A	839	GLY	5	-8.011	-7.665
A	840	ASP	2	-8.832	-8.047
A	841	ILE	11	-12.841	-12.629
A	842	ALA	11	-15.453	-14.941
A	843	ALA	13	-15.493	-15.206
A	844	ARG	11	-17.383	-16.649
A	845	ASP	19	-18.323	-18.401
A	846	LEU	17	-21.508	-20.990
A	847	ILE	24	-22.619	-22.778
A	848	CYS	15	-20.955	-20.271
A	849	ALA	23	-24.629	-24.441
A	850	GLN	28	-26.555	-26.721
A	851	LYS	22	-26.162	-25.683
A	852	PHE	17	-26.647	-25.537
A	853	ASN	25	-29.489	-28.973
A	854	GLY	26	-28.876	-28.545
A	855	LEU	30	-29.674	-29.712
A	856	THR	18	-27.060	-26.018
A	857	VAL	29	-23.223	-23.887
A	858	LEU	19	-22.963	-22.508
A	859	PRO	11	-18.264	-17.429
A	860	PRO	28	-17.502	-18.710
A	861	LEU	18	-13.259	-13.804
A	862	LEU	29	-15.215	-16.801
A	863	THR	8	-12.946	-12.377

A	864	ASP	24	-15.980	-16.902	
A	865	GLU	7	-11.954	-11.384	
A	866	MET	15	-14.391	-14.461	
A	867	ILE	31	-20.829	-21.999	
A	868	ALA	22	-18.855	-19.217	
A	869	GLN	11	-15.471	-14.956	
A	870	TYR	27	-20.501	-21.248	
A	871	THR	39	-23.404	-25.197	
A	872	SER	24	-19.078	-19.644	
A	873	ALA	22	-18.247	-18.679	
A	874	LEU	36	-24.088	-25.458	
A	875	LEU	32	-23.720	-24.672	
A	876	ALA	25	-19.927	-20.511	
A	877	GLY	34	-22.101	-23.470	
A	878	THR	32	-23.770	-24.717	
A	879	ILE	29	-20.366	-21.359	
A	880	THR	19	-16.334	-16.640	
A	881	SER	27	-16.801	-17.974	
A	882	GLY	18	-20.541	-20.249	
A	883	TRP	22	-21.505	-21.562	
A	884	THR	15	-16.509	-16.335	
A	885	PHE	31	-17.682	-19.213	
A	886	GLY	24	-19.561	-20.071	
A	887	ALA	13	-14.082	-13.957	
A	888	GLY	4	-11.120	-10.301	
A	889	ALA	2	-11.769	-10.646	
A	890	ALA	22	-13.769	-14.716	
A	891	LEU	11	-11.755	-11.668	
A	892	GLN	10	-11.140	-11.009	
A	893	ILE	19	-11.083	-11.994	
A	894	PRO	11	-11.379	-11.336	
A	895	PHE	26	-14.562	-15.877	
A	896	ALA	19	-13.123	-13.799	
A	897	MET	9	-11.240	-10.983	
A	898	GLN	31	-13.886	-15.854	
A	899	MET	28	-14.695	-16.225	
A	900	ALA	15	-10.884	-11.357	
A	901	TYR	17	-11.153	-11.826	
A	902	ARG	38	-15.124	-17.755	
A	903	PHE	27	-11.189	-13.007	
A	904	ASN	10	-8.864	-8.995	
A	905	GLY	30	-11.206	-13.367	
A	906	ILE	33	-9.856	-12.518	
A	907	GLY	21	-6.772	-8.409	
A	908	VAL	36	-7.758	-11.006	
A	909	THR	19	-3.797	-5.546	
A	910	GLN	11	-5.439	-6.078	
A	911	ASN	7	-1.315	-1.969	<=B
A	912	VAL	29	-3.427	-6.368	
A	913	LEU	26	-7.558	-9.678	

A	914	TYR	9	-2.842	-3.550	<=B
A	915	GLU	11	-2.292	-3.293	<=B
A	916	ASN	23	-3.057	-5.350	
A	917	GLN	19	-5.315	-6.889	
A	918	LYS	1	-4.680	-4.256	
A	919	LEU	14	-4.424	-5.525	
A	920	ILE	28	-9.189	-11.352	
A	921	ALA	20	-10.980	-12.017	
A	922	ASN	7	-7.739	-7.654	
A	923	GLN	23	-11.340	-12.681	
A	924	PHE	30	-15.231	-16.930	
A	925	ASN	12	-14.283	-14.021	
A	926	SER	11	-13.096	-12.855	
A	927	ALA	28	-17.640	-18.831	
A	928	ILE	25	-19.120	-19.796	
A	929	GLY	10	-15.618	-14.972	
A	930	LYS	14	-15.310	-15.159	
A	931	ILE	35	-19.435	-21.225	
A	932	GLN	14	-15.575	-15.394	
A	933	ASP	8	-11.804	-11.367	
A	934	SER	19	-14.288	-14.830	
A	935	LEU	31	-15.230	-17.043	
A	936	SER	8	-10.123	-9.879	
A	937	SER	6	-8.497	-8.210	
A	938	THR	9	-10.112	-9.984	
A	939	ALA	3	-10.767	-9.874	
A	940	SER	3	-14.971	-13.594	
A	941	ALA	27	-19.421	-20.293	
A	942	LEU	33	-20.482	-21.921	
A	943	GLY	7	-18.271	-16.975	
A	944	LYS	21	-19.442	-19.621	
A	945	LEU	32	-23.892	-24.825	
A	946	GLN	12	-19.208	-18.379	
A	947	ASP	15	-20.244	-19.641	
A	948	VAL	35	-21.741	-23.266	
A	949	VAL	22	-23.924	-23.703	
A	950	ASN	10	-21.885	-20.518	
A	951	GLN	23	-20.139	-20.468	
A	952	ASN	36	-24.595	-25.906	
A	953	ALA	17	-24.197	-23.369	
A	954	GLN	11	-23.766	-22.298	
A	955	ALA	29	-24.355	-24.889	
A	956	LEU	30	-26.583	-26.976	
A	957	ASN	15	-26.574	-25.243	
A	958	THR	20	-26.202	-25.489	
A	959	LEU	38	-29.459	-30.441	
A	960	VAL	20	-29.406	-28.325	
A	961	LYS	12	-26.665	-24.979	
A	962	GLN	27	-26.176	-26.271	
A	963	LEU	27	-28.272	-28.126	

A	964	SER	11	-24.335	-22.801
A	965	SER	21	-21.593	-21.524
A	966	ASN	4	-17.452	-15.905
A	967	PHE	23	-16.296	-17.067
A	968	GLY	7	-11.475	-10.961
A	969	ALA	30	-14.407	-16.200
A	970	ILE	13	-11.099	-11.318
A	971	SER	12	-13.924	-13.702
A	972	SER	10	-20.801	-19.559
A	973	VAL	4	-21.742	-19.702
A	974	LEU	24	-22.732	-22.878
A	975	ASN	4	-19.295	-17.536
A	976	ASP	11	-13.251	-12.992
A	977	ILE	30	-16.083	-17.683
A	978	LEU	17	-14.905	-15.145
A	979	ALA	7	-11.670	-11.133
A	980	ARG	12	-10.570	-10.735
A	981	LEU	20	-11.787	-12.731
A	982	ASP	1	-10.801	-9.674
A	983	LYS	2	-11.083	-10.039
A	984	VAL	0	-11.072	-9.799
A	985	GLU	10	-12.046	-11.811
A	986	ALA	20	-15.493	-16.011
A	987	GLU	7	-16.101	-15.055
A	988	VAL	6	-15.219	-14.159
A	989	GLN	22	-16.596	-17.217
A	990	ILE	31	-20.614	-21.808
A	991	ASP	11	-19.825	-18.810
A	992	ARG	18	-18.820	-18.726
A	993	LEU	35	-22.121	-23.602
A	994	ILE	23	-23.798	-23.706
A	995	THR	10	-21.088	-19.813
A	996	GLY	22	-21.196	-21.289
A	997	ARG	34	-25.112	-26.134
A	998	LEU	21	-25.461	-24.948
A	999	GLN	9	-21.022	-19.639
A	1000	SER	32	-23.800	-24.743
A	1001	LEU	32	-25.923	-26.622
A	1002	GLN	10	-21.714	-20.367
A	1003	THR	19	-19.975	-19.863
A	1004	TYR	39	-22.986	-24.827
A	1005	VAL	25	-22.332	-22.639
A	1006	THR	7	-15.348	-14.388
A	1007	GLN	19	-14.907	-15.377
A	1008	GLN	38	-21.429	-23.335
A	1009	LEU	14	-16.246	-15.987
A	1010	ILE	8	-13.269	-12.663
A	1011	ARG	28	-17.493	-18.701
A	1012	ALA	22	-19.200	-19.522
A	1013	ALA	6	-15.808	-14.680

A	1014	GLU	18	-16.528	-16.697
A	1015	ILE	35	-20.522	-22.187
A	1016	ARG	13	-20.415	-19.562
A	1017	ALA	8	-16.819	-15.805
A	1018	SER	24	-22.160	-22.371
A	1019	ALA	27	-22.882	-23.355
A	1020	ASN	7	-19.080	-17.691
A	1021	LEU	21	-20.427	-20.492
A	1022	ALA	35	-25.561	-26.646
A	1023	ALA	19	-23.936	-23.369
A	1024	THR	13	-21.778	-20.769
A	1025	LYS	35	-26.239	-27.247
A	1026	MET	34	-29.216	-29.766
A	1027	SER	12	-22.537	-21.325
A	1028	GLU	16	-23.297	-22.458
A	1029	CYS	38	-28.342	-29.452
A	1030	VAL	33	-28.398	-28.927
A	1031	LEU	25	-25.673	-25.596
A	1032	GLY	15	-23.953	-22.924
A	1033	GLN	24	-22.696	-22.846
A	1034	SER	25	-21.256	-21.687
A	1035	LYS	9	-13.208	-12.724
A	1036	ARG	16	-13.019	-13.362
A	1037	VAL	1	-12.628	-11.291
A	1038	ASP	1	-15.811	-14.108
A	1039	PHE	21	-19.180	-19.390
A	1040	CYS	33	-26.030	-26.832
A	1041	GLY	28	-24.168	-24.609
A	1042	LYS	2	-19.408	-17.406
A	1043	GLY	26	-15.180	-16.424
A	1044	TYR	21	-13.259	-14.150
A	1045	HIS	27	-20.013	-20.817
A	1046	LEU	36	-20.552	-22.328
A	1047	MET	34	-26.751	-27.585
A	1048	SER	37	-28.823	-29.763
A	1049	PHE	34	-28.487	-29.121
A	1050	PRO	42	-28.580	-30.123
A	1051	GLN	35	-24.894	-26.056
A	1052	SER	30	-25.691	-26.187
A	1053	ALA	33	-24.601	-25.567
A	1054	PRO	25	-23.995	-24.110
A	1055	HIS	38	-26.390	-27.725
A	1056	GLY	32	-26.562	-27.187
A	1057	VAL	44	-28.031	-29.868
A	1058	VAL	36	-27.086	-28.111
A	1059	PHE	36	-30.638	-31.255
A	1060	LEU	36	-29.068	-29.865
A	1061	HIS	28	-28.775	-28.686
A	1062	VAL	36	-25.835	-27.004
A	1063	THR	21	-20.780	-20.805

A	1064	TYR	33	-13.555	-15.791	
A	1065	VAL	17	-11.391	-12.036	
A	1066	PRO	17	-8.517	-9.492	
A	1067	ALA	11	-6.619	-7.123	
A	1068	GLN	6	-3.705	-3.969	
A	1069	GLU	15	-3.545	-4.862	
A	1070	LYS	16	-3.361	-4.814	
A	1071	ASN	9	-3.232	-3.895	
A	1072	PHE	30	-5.800	-8.583	
A	1073	THR	12	-6.807	-7.404	
A	1074	THR	25	-8.253	-10.179	
A	1075	ALA	28	-9.370	-11.512	
A	1076	PRO	12	-9.847	-10.095	
A	1077	ALA	20	-10.058	-11.202	
A	1078	ILE	29	-9.160	-11.441	
A	1079	CYS	14	-9.173	-9.728	
A	1080	HIS	23	-7.489	-9.273	
A	1081	ASP	13	-7.336	-7.988	
A	1082	GLY	0	-8.002	-7.082	
A	1083	LYS	13	-8.372	-8.904	
A	1084	ALA	15	-9.090	-9.770	
A	1085	HIS	29	-8.522	-10.877	
A	1086	PHE	13	-8.318	-8.856	
A	1087	PRO	19	-5.819	-7.335	
A	1088	ARG	11	-5.421	-6.062	
A	1089	GLU	16	-4.166	-5.527	
A	1090	GLY	31	-5.669	-8.582	
A	1091	VAL	22	-7.563	-9.223	
A	1092	PHE	33	-8.274	-11.117	
A	1093	VAL	24	-7.363	-9.276	
A	1094	SER	18	-6.333	-7.675	
A	1095	ASN	12	-3.780	-4.725	
A	1096	GLY	2	-4.330	-4.062	
A	1097	THR	0	-4.066	-3.599	<=B
A	1098	HIS	9	-3.035	-3.721	
A	1099	TRP	26	-5.491	-7.850	
A	1100	PHE	18	-4.913	-6.418	
A	1101	VAL	24	-6.163	-8.214	
A	1102	THR	26	-5.731	-8.062	
A	1103	GLN	18	-3.945	-5.561	
A	1104	ARG	13	-5.749	-6.583	
A	1105	ASN	23	-5.012	-7.081	
A	1106	PHE	22	-4.740	-6.725	
A	1107	TYR	21	-3.790	-5.769	
A	1108	GLU	20	-1.795	-3.889	
A	1109	PRO	20	-3.014	-4.967	
A	1110	GLN	23	-2.231	-4.619	
A	1111	ILE	7	-3.257	-3.687	<=B
A	1112	ILE	31	-4.998	-7.989	
A	1113	THR	11	-4.924	-5.623	

A	1114	THR	9	-4.358	-4.892	
A	1115	HIS	6	-2.716	-3.094	<=B
A	1116	ASN	26	-5.195	-7.588	
A	1117	THR	32	-6.059	-9.042	
A	1118	PHE	4	-6.830	-6.505	
A	1119	VAL	15	-7.573	-8.427	
A	1120	SER	8	-8.108	-8.096	
A	1121	GLY	9	-8.600	-8.646	
A	1122	ASN	3	-8.506	-7.873	
A	1123	CYS	13	-10.542	-10.824	
A	1124	ASP	0	-9.599	-8.496	
A	1125	VAL	8	-9.394	-9.233	
A	1126	VAL	23	-10.608	-12.033	
A	1127	ILE	2	-10.127	-9.193	
A	1128	GLY	10	-10.188	-10.167	
A	1129	ILE	23	-10.450	-11.893	
A	1130	VAL	21	-9.379	-10.715	
A	1131	ASN	2	-7.928	-7.246	
A	1132	ASN	33	-6.728	-9.749	
A	1133	THR	4	-6.127	-5.883	
A	1134	VAL	26	-6.599	-8.830	
A	1135	TYR	14	-3.686	-4.873	
A	1136	ASP	11	-2.850	-3.787	
A	1137	PRO	8	-0.740	-1.575	<=B
A	1138	LEU	3	-0.411	-0.709	<=B
A	1139	GLN	7	-0.014	-0.817	<=B
A	1140	PRO	6	1.007	0.201	<=B
A	1141	GLU	6	0.875	0.085	<=B
A	1142	LEU	5	1.142	0.436	<=B
A	1143	ASP	6	2.126	1.191	<=B
A	1144	SER	5	1.191	0.479	<=B
A	1145	PHE	6	1.244	0.411	<=B
A	1146	LYS	6	1.738	0.848	<=B
A	1147	GLU	5	2.628	1.751	<=B
A	1148	GLU	6	2.408	1.441	<=B
A	1149	LEU	7	2.175	1.120	<=B
A	1150	ASP	6	2.859	1.841	<=B
A	1151	LYS	5	2.861	1.957	<=B
A	1152	TYR	5	2.679	1.796	<=B
A	1153	PHE	6	3.004	1.968	<=B
A	1154	LYS	6	3.279	2.212	<=B
A	1155	ASN	6	3.174	2.119	<=B
A	1156	HIS	7	2.976	1.829	<=B
A	1157	THR	5	3.209	2.265	<=B
A	1158	SER	5	3.114	2.181	<=B
A	1159	PRO	4	3.213	2.383	<=B

Identified 99 B-Cell epitope residues out of 1146 total residues