BcePred Prediction Server

The server displays 1.<u>GRAPHICAL RESULT</u> 2.<u>TABULAR RESULT</u>   3.<u>Overlap Display</u>
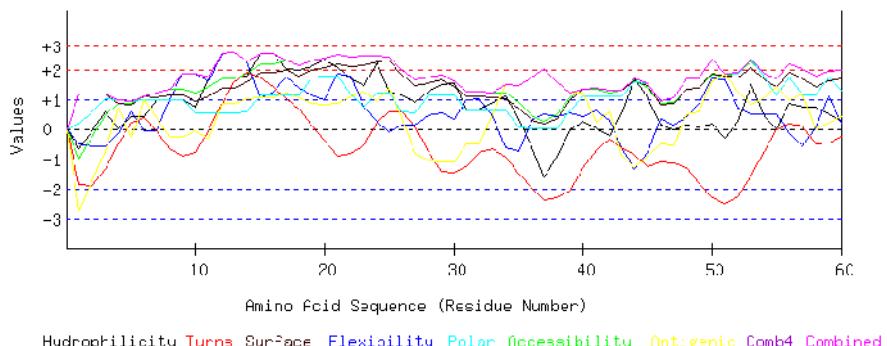
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Length=874

GRAPHICAL RESULT

GRAPHICAL RESULT :: SEQ 1 to 60
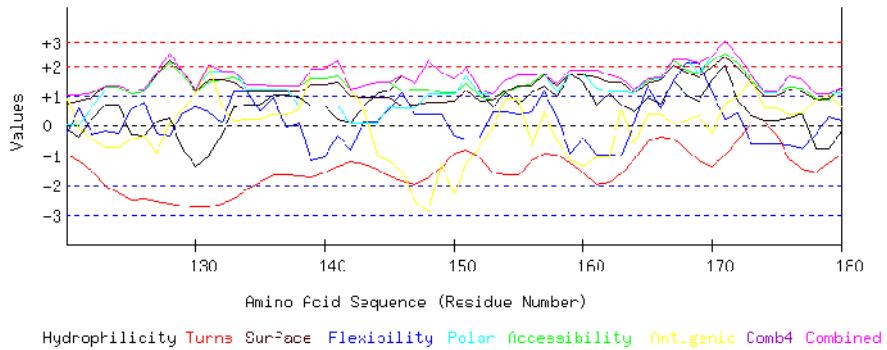
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 61 to 120
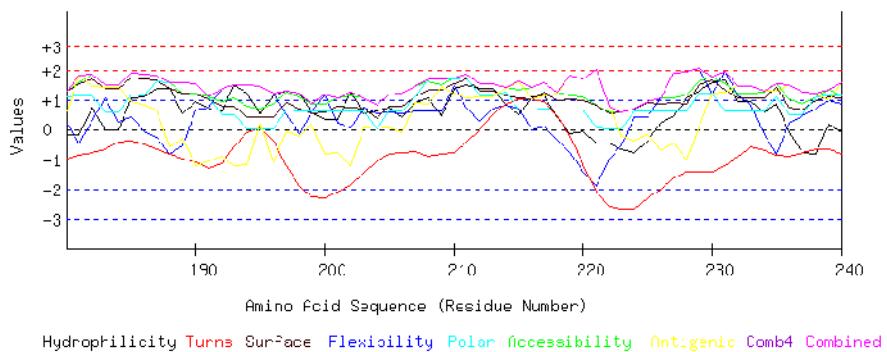
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
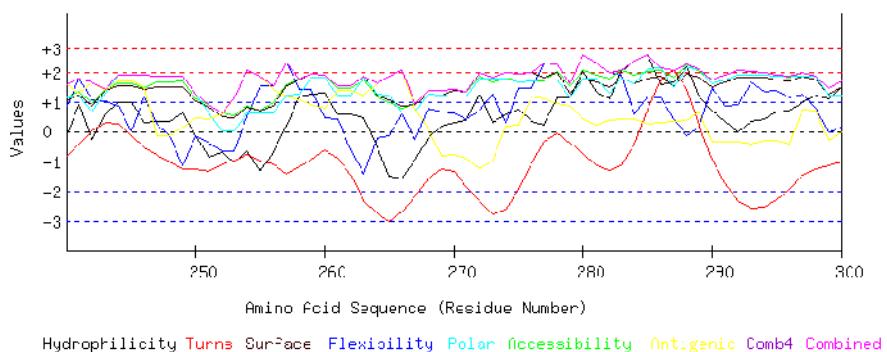
GRAPHICAL RESULT :: SEQ 121 to 180

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
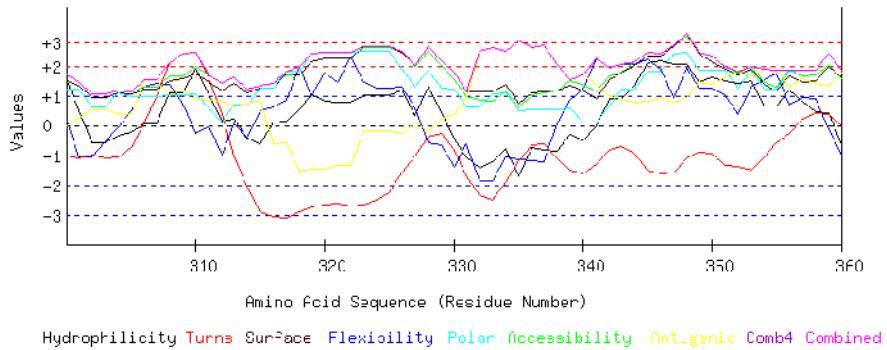
GRAPHICAL RESULT :: SEQ 181 to 240

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
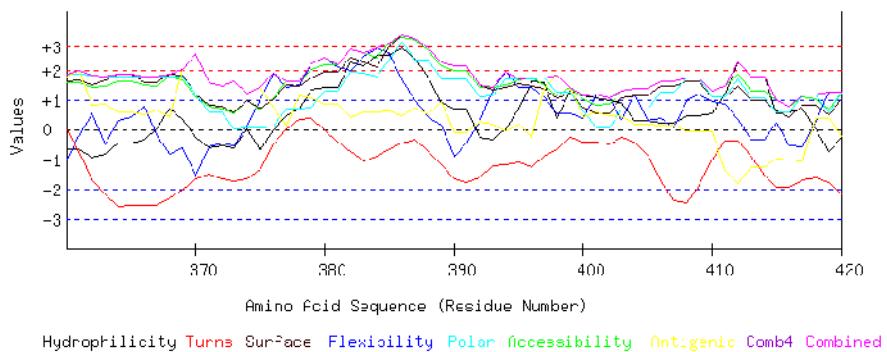
GRAPHICAL RESULT :: SEQ 241 to 300

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
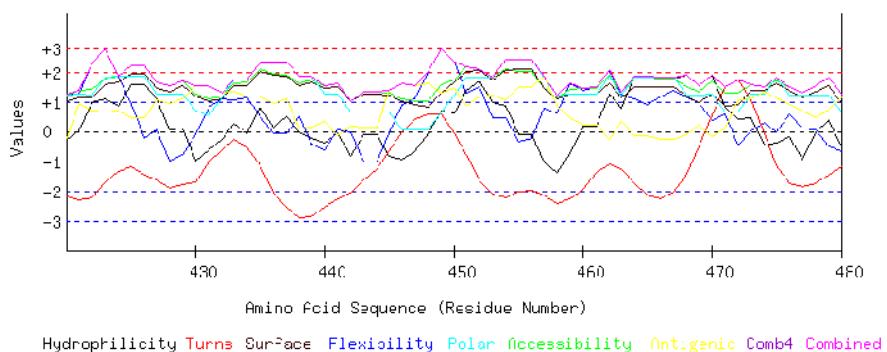
GRAPHICAL RESULT :: SEQ 301 to 360

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
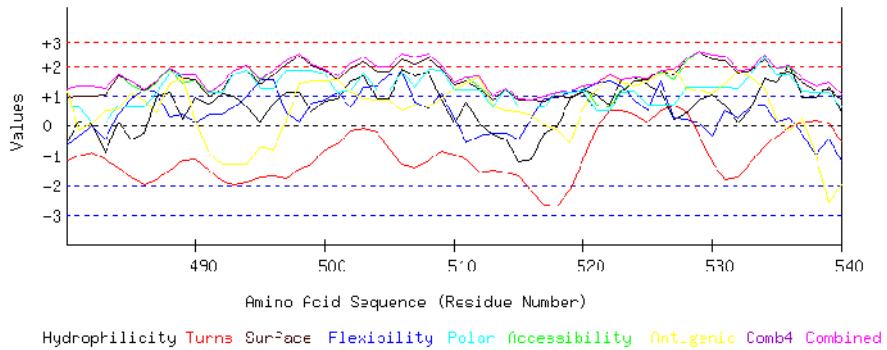
GRAPHICAL RESULT :: SEQ 361 to 420

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
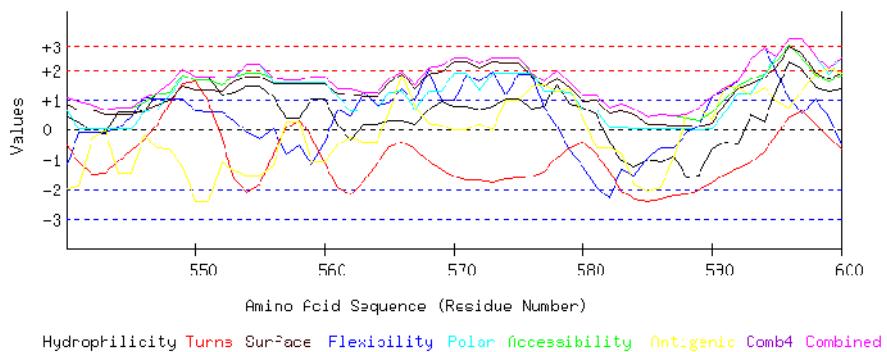
GRAPHICAL RESULT :: SEQ 421 to 480

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
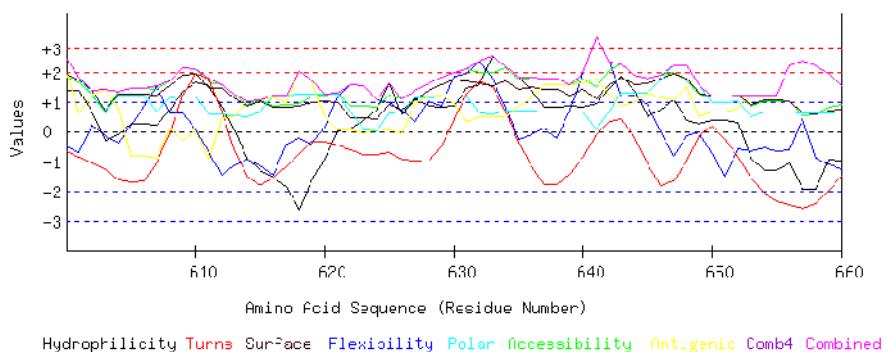
GRAPHICAL RESULT :: SEQ 481 to 540

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
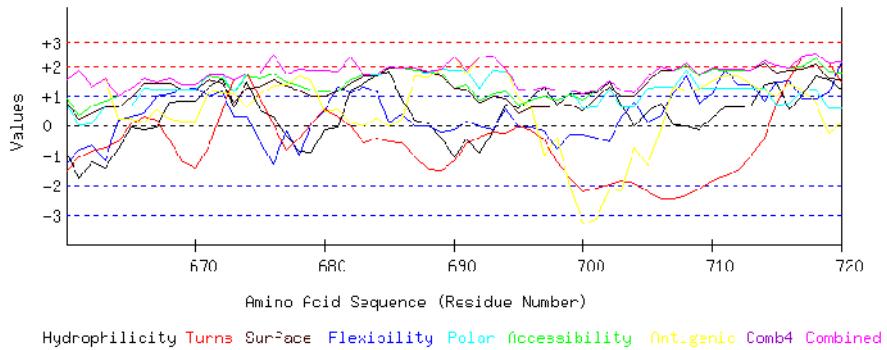
GRAPHICAL RESULT :: SEQ 541 to 600

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
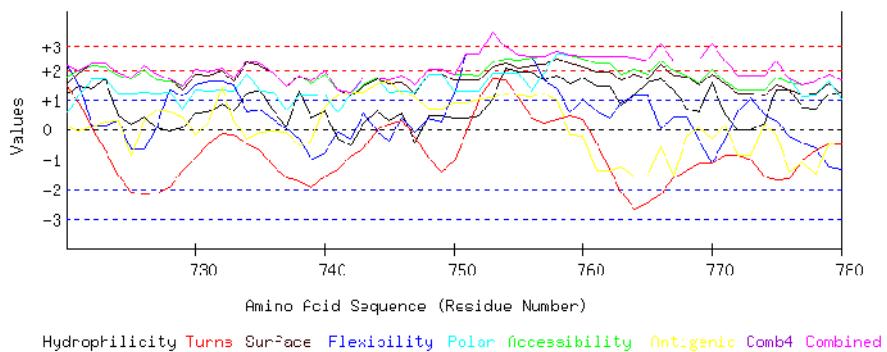
GRAPHICAL RESULT :: SEQ 601 to 660

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
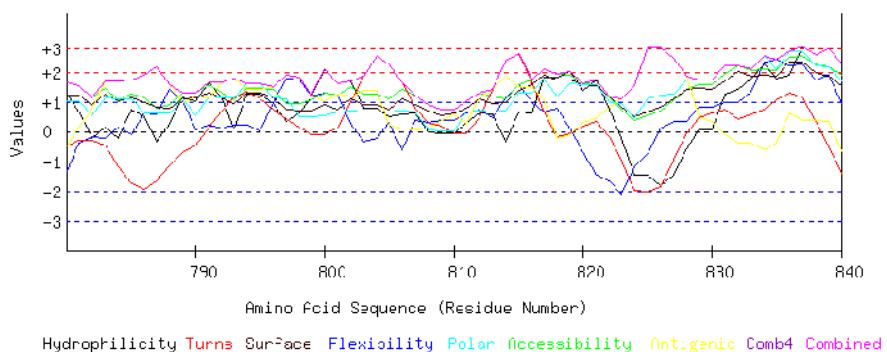
GRAPHICAL RESULT :: SEQ 661 to 720

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined
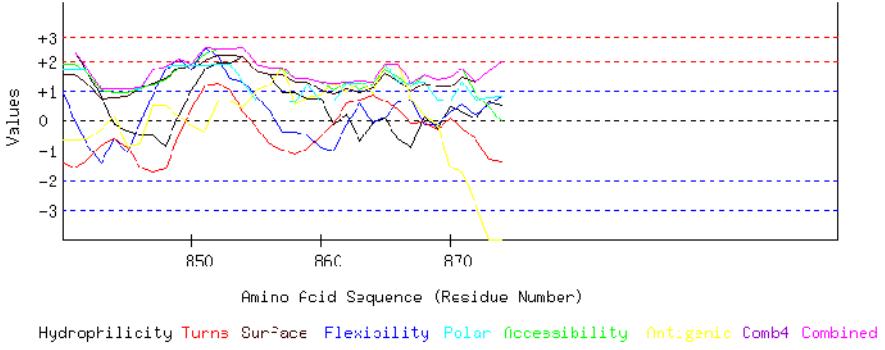
GRAPHICAL RESULT :: SEQ 721 to 780

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 781 to 840

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 841 to 900

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

[TOP]

TABULAR RESULT

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Selected Programs: hydro flexi access turns surface polar antipro

Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9

MAVVDDLAPGMDSSPPSEDYGRQPPQDLAAEQSVLGGMLLSKDAIADVLERLRPGDFYRP
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Length=874
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A.A. pppppppppppppppppppppppppppppppp Parameter ppppppppppppppppppppppppppppppppppppppppppp Combined

		Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX	MIN	AVG
1	M	-0.680	-0.502	-0.981	-1.868	1.185	0.170	-2.736	1.185	-2.736	-0.773
2	A	-0.047	-0.593	-0.252	-1.901	1.185	0.599	-1.735	1.185	-1.901	-0.392
3	V	0.585	-0.593	0.477	-1.324	1.185	1.028	-0.734	1.185	-1.324	0.089
4	V	0.003	-0.138	0.851	-0.497	0.875	0.973	0.711	0.973	-0.497	0.397
5	D	0.402	0.586	0.860	0.232	0.829	0.956	-0.244	0.956	-0.244	0.517
6	D	0.402	-0.068	1.103	0.380	1.103	0.975	0.986	1.103	-0.068	0.697
7	L	0.996	-0.068	1.216	-0.051	1.066	0.974	0.398	1.216	-0.068	0.647
8	A	0.964	0.992	1.328	-0.644	1.121	0.989	-0.246	1.328	-0.644	0.643
9	P	0.964	1.848	1.328	-0.911	1.121	0.989	-0.246	1.848	-0.911	0.728
10	G	0.743	1.848	1.206	-0.777	0.957	0.520	-0.077	1.848	-0.777	0.631
11	M	1.736	1.579	1.440	-0.036	1.103	0.535	-0.353	1.736	-0.353	0.858
12	D	1.736	2.549	1.683	0.855	1.376	0.554	0.877	2.549	0.554	1.376
13	S	1.736	2.585	1.568	1.568	1.376	0.554	0.877	2.585	0.554	1.483
14	S	1.786	2.269	1.842	1.918	1.576	0.574	1.037	2.269	0.574	1.572
15	P	2.545	1.006	2.178	1.750	1.895	1.156	1.066	2.545	1.006	1.657
16	P	2.545	1.275	2.178	1.414	1.895	1.156	1.066	2.545	1.066	1.647
17	S	2.014	1.730	2.281	1.000	1.977	1.156	1.238	2.281	1.000	1.628
18	E	1.963	1.365	2.122	0.660	1.777	1.136	1.079	2.122	0.660	1.443
19	D	2.096	1.149	2.309	0.128	1.977	1.741	0.858	2.309	0.128	1.466
20	Y	2.343	0.968	2.393	-0.379	2.078	1.765	0.801	2.393	-0.379	1.424
21	G	2.064	1.866	2.487	-0.887	2.196	1.764	0.861	2.487	-0.887	1.479
22	R	1.704	1.778	2.403	-0.809	2.105	1.183	1.108	2.403	-0.809	1.353
23	Q	1.451	0.760	2.459	-0.532	2.160	0.737	1.280	2.459	-0.532	1.188
24	P	2.203	0.269	2.477	0.201	2.242	1.206	0.939	2.477	0.201	1.363
25	P	1.261	-0.090	2.403	0.561	2.296	1.212	1.373	2.403	-0.090	1.288

26 Q	1.129	0.127	1.973	0.599	1.823	0.587	0.364	1.973	0.127	0.943
27 D	0.882	0.127	1.646	0.059	1.449	0.545	-0.809	1.646	-0.809	0.557
28 L	1.242	0.443	1.730	-0.728	1.540	1.125	-1.055	1.730	-1.055	0.614
29 A	1.489	0.552	1.814	-1.417	1.640	1.149	-1.112	1.814	-1.417	0.588
30 A	1.521	0.347	1.636	-1.476	1.422	1.126	-1.116	1.636	-1.476	0.494
31 E	0.655	0.974	1.244	-1.262	1.093	0.639	-0.518	1.244	-1.262	0.404
32 Q	0.655	1.026	1.244	-0.765	1.093	0.639	-0.518	1.244	-0.765	0.482
33 S	0.882	0.421	1.234	-0.656	1.048	0.639	0.493	1.234	-0.656	0.580
34 V	1.110	-0.639	1.225	-0.954	1.002	0.639	1.503	1.503	-0.954	0.555
35 L	0.351	-0.747	0.889	-1.510	0.683	0.056	1.474	1.474	-1.510	0.171
36 G	-0.610	0.313	0.477	-1.979	0.319	0.019	1.746	1.746	-1.979	0.041
37 G	-1.603	0.517	0.244	-2.390	0.173	0.005	2.021	2.021	-2.390	-0.148
38 M	-0.958	0.429	0.515	-2.281	0.337	0.023	1.592	1.592	-2.281	-0.049
39 L	-0.016	0.544	1.047	-2.063	0.966	0.613	1.222	1.222	-2.063	0.330
40 L	0.256	0.423	1.328	-1.306	1.330	1.101	1.213	1.330	-1.306	0.621
41 S	0.029	0.628	1.337	-0.706	1.376	1.101	0.202	1.376	-0.706	0.567
42 K	-0.212	0.311	1.206	-0.332	1.312	1.086	0.579	1.312	-0.332	0.564
43 D	0.503	-0.617	1.290	-0.606	1.303	1.081	-0.866	1.303	-0.866	0.298
44 A	1.717	-1.360	1.646	-0.871	1.613	1.564	-1.310	1.717	-1.360	0.428
45 I	1.072	-0.785	1.375	-1.277	1.449	1.546	-0.881	1.546	-1.277	0.357
46 A	0.130	0.353	0.842	-1.099	0.820	0.956	-0.511	0.956	-1.099	0.213
47 D	-0.009	0.149	0.898	-1.128	0.866	1.067	-0.528	1.067	-1.128	0.188
48 V	0.123	0.423	1.328	-1.307	1.339	1.692	0.481	1.692	-1.307	0.583
49 L	0.048	0.878	1.384	-1.818	1.367	1.695	0.594	1.695	-1.818	0.593
50 E	0.180	1.710	1.814	-2.314	1.841	2.320	1.603	2.320	-2.314	1.022
51 R	-0.319	1.674	1.786	-2.504	1.795	1.850	1.832	1.850	-2.504	0.873
52 L	0.275	0.686	1.898	-2.259	1.759	1.849	1.244	1.898	-2.259	0.779
53 R	1.489	0.483	2.253	-1.529	2.069	2.332	0.800	2.332	-1.529	1.128
54 P	0.414	0.483	1.860	-0.752	1.658	1.737	1.077	1.860	-0.752	0.926
55 G	0.029	0.483	1.683	-0.001	1.422	1.131	1.410	1.683	-0.001	0.880
56 D	0.876	-0.144	2.197	0.182	1.886	1.751	0.975	2.197	-0.144	1.103
57 F	0.743	-0.593	2.010	0.080	1.686	1.145	1.195	2.010	-0.593	0.895
58 Y	0.743	0.073	1.767	-0.512	1.412	1.126	-0.035	1.767	-0.512	0.653
59 R	0.515	1.089	1.935	-0.464	1.631	1.746	0.232	1.935	-0.464	0.955
60 P	0.263	0.179	1.991	-0.268	1.686	1.299	0.405	1.991	-0.268	0.793
61 A	1.287	-0.587	2.356	0.770	2.041	1.336	0.040	2.356	-0.587	1.035
62 H	1.173	-0.048	1.982	1.465	1.795	1.318	0.297	1.982	-0.048	1.140
63 Q	0.787	-0.138	1.804	1.925	1.558	0.713	0.630	1.925	-0.138	1.040
64 N	1.287	-0.953	1.832	1.668	1.604	1.183	0.401	1.832	-0.953	1.003
65 V	1.287	-1.767	1.832	1.169	1.604	1.183	0.401	1.832	-1.767	0.816
66 Y	0.648	-1.131	1.533	0.298	1.412	0.564	0.456	1.533	-1.131	0.540
67 D	-0.313	-0.929	1.122	-0.364	1.048	0.527	0.727	1.122	-0.929	0.260
68 A	-0.123	-1.875	1.094	-0.987	1.057	0.976	0.831	1.094	-1.875	0.139
69 I	-0.471	-1.248	1.132	-1.303	1.075	0.980	0.677	1.132	-1.303	0.120
70 L	-0.471	-0.110	1.132	-1.174	1.075	0.980	0.677	1.132	-1.174	0.301
71 D	-0.743	0.722	0.851	-1.070	0.711	0.491	0.687	0.851	-1.070	0.236
72 L	-0.610	0.758	1.281	-1.022	1.185	1.115	1.696	1.696	-1.022	0.629
73 Y	0.256	1.321	1.412	-1.304	1.157	1.114	1.375	1.412	-1.304	0.761
74 G	1.331	1.728	1.823	-1.668	1.513	1.708	0.913	1.823	-1.668	1.050
75 R	0.832	1.639	1.795	-1.876	1.467	1.238	1.142	1.795	-1.876	0.891
76 G	1.546	0.826	1.879	-1.740	1.458	1.232	-0.303	1.879	-1.740	0.700
77 E	2.298	0.103	1.898	-1.209	1.540	1.702	-0.644	2.298	-1.209	0.813
78 P	2.071	0.019	1.907	-0.757	1.586	1.702	-1.654	2.071	-1.654	0.696
79 A	1.571	-0.436	1.356	-0.352	1.103	1.079	-1.065	1.571	-1.065	0.465
80 D	1.540	-0.436	1.561	-0.340	1.303	1.099	-1.024	1.561	-1.024	0.529
81 A	0.813	-0.975	1.113	-0.572	0.929	0.501	-0.409	1.113	-0.975	0.200
82 V	0.813	-0.400	0.870	-1.031	0.656	0.482	-1.639	0.870	-1.639	-0.036
83 T	0.813	-0.508	0.870	-1.320	0.656	0.482	-1.639	0.870	-1.639	-0.093
84 V	0.673	-0.460	0.926	-1.715	0.701	0.592	-1.657	0.926	-1.715	-0.134
85 A	-0.041	0.449	0.842	-1.964	0.711	0.598	-0.212	0.842	-1.964	0.055
86 A	0.825	1.263	1.234	-1.865	1.039	1.085	-0.809	1.263	-1.865	0.396
87 E	0.762	1.890	1.468	-1.723	1.358	1.690	-0.851	1.890	-1.723	0.656
88 L	1.261	1.111	2.019	-1.335	1.841	2.313	-1.440	2.313	-1.440	0.824
89 D	1.489	1.111	2.010	-1.204	1.795	2.313	-0.430	2.313	-1.204	1.012
90 R	0.775	1.385	1.926	-1.411	1.804	2.318	1.015	2.318	-1.411	1.116
91 R	-0.300	1.385	1.515	-1.859	1.449	1.724	1.476	1.724	-1.859	0.770
92 G	0.547	0.247	2.029	-2.199	1.914	2.344	1.040	2.344	-2.199	0.846
93 L	0.180	0.247	2.188	-2.553	2.069	2.479	1.049	2.479	-2.553	0.808
94 L	-0.591	1.078	1.617	-2.719	1.576	1.856	1.371	1.856	-2.719	0.599
95 R	-0.496	1.283	1.178	-2.829	1.057	1.232	1.372	1.372	-2.829	0.400
96 R	-0.496	0.828	1.178	-2.864	1.057	1.232	1.372	1.372	-2.864	0.330
97 I	0.218	-0.392	1.262	-2.678	1.048	1.226	-0.073	1.262	-2.678	0.087
98 G	0.933	-0.272	1.589	-2.230	1.312	1.240	-0.288	1.589	-2.230	0.326
99 G	0.547	-0.809	1.412	-1.712	1.075	0.635	0.045	1.412	-1.712	0.170
100A	-0.300	-0.945	0.898	-1.292	0.610	0.015	0.481	0.898	-1.292	-0.076
101P	0.338	-1.150	1.197	-0.695	0.802	0.633	0.427	1.197	-1.150	0.222
102Y	0.307	-1.833	1.403	-0.241	1.002	0.653	0.467	1.403	-1.833	0.251
103L	-0.635	-0.570	1.328	0.188	1.057	0.659	0.902	1.328	-0.635	0.418
104H	-1.274	0.125	1.188	0.229	1.039	0.661	2.234	2.234	-1.274	0.600
105T	-0.996	-0.062	1.094	-0.039	0.920	0.662	2.173	2.173	-0.996	0.536
106L	-0.547	-0.194	1.038	-0.527	0.838	0.662	1.882	1.882	-0.547	0.450
107I	-0.199	0.501	1.001	-0.671	0.820	0.658	2.036	2.036	-0.671	0.592
108S	-0.199	0.826	1.085	-0.606	0.920	0.058	1.988	1.988	-0.606	0.582
109T	-0.199	-0.030	1.085	-0.301	0.920	0.058	1.988	1.988	-0.301	0.503
110V	0.515	0.089	1.169	-0.228	0.911	0.052	0.543	1.169	-0.228	0.436
111P	1.154	0.185	1.309	-0.346	0.929	0.050	-0.788	1.309	-0.788	0.356
112T	1.186	0.453	1.459	-0.321	1.084	0.071	-1.061	1.459	-1.061	0.410
113A	0.990	-0.444	1.262	-0.249	0.929	0.051	-2.112	1.262	-2.112	0.061
114A	1.584	-0.851	1.375	0.113	0.893	0.049	-2.701	1.584	-2.701	0.066
115N	1.331	-0.851	1.384	0.158	0.856	0.050	-2.588	1.384	-2.588	0.049
116A	0.882	-0.605	1.440	-0.069	0.938	0.049	-2.297	1.440	-2.297	0.048
117G	0.882	-0.929	1.440	-0.627	0.938	0.049	-2.297	1.440	-2.297	-0.078
118Y	1.160	-1.652	1.589	-0.806	1.093	0.069	-1.127	1.589	-1.652	0.047
119Y	0.212	-1.246	1.150	-1.099	0.765	0.030	-0.692	1.150	-1.246	-0.126
120A	-0.155	-0.264	1.029	-0.963	0.756	0.032	0.906	1.029	-0.963	0.192
121S	-0.382	0.568	1.038	-1.162	0.802	0.032	-0.104	1.038	-1.162	0.113
122I	0.231	-0.288	1.113	-1.535	0.929	0.612	-0.462	1.113	-1.535	0.086
123V	0.711	-0.168	1.309	-2.021	1.330	1.187	-0.729	1.330	-2.021	0.231
124A	0.711	-0.276	1.309	-2.255	1.330	1.187	-0.729	1.330	-2.255	0.183
125E	-0.281	0.538	1.075	-2.492	1.185	1.173	-0.454	1.185	-2.492	0.106
126K	-0.357	0.776	1.132	-2.465	1.212	1.176	-0.341	1.212	-2.465	0.162
127A	0.142	-0.260	1.683	-2.534	1.695	1.800	-0.931	1.800	-2.534	0.228
128L	0.275	-0.356	2.113	-2.618	2.169	2.424	0.079	2.424	-2.618	0.584
129L	-0.800	0.443	1.702	-2.712	1.813	1.830	0.540	1.830	-2.712	0.400
130R	-1.394	0.628	1.132	-2.753	1.166	1.237	1.064	1.237	-2.753	0.154

131R	-1.034	0.441	1.459	-2.741	1.531	1.837	2.047	2.047	-2.741	0.506
132L	-0.319	0.119	1.543	-2.627	1.522	1.831	0.602	1.831	-2.627	0.381
133V	0.623	1.137	1.617	-2.459	1.467	1.826	0.168	1.826	-2.459	0.625
134E	0.686	1.137	1.384	-2.159	1.148	1.221	0.209	1.384	-2.159	0.518
135A	0.686	0.465	1.384	-1.904	1.148	1.221	0.209	1.384	-1.904	0.459
136G	1.034	0.956	1.346	-1.675	1.130	1.217	0.363	1.346	-1.675	0.625
137T	1.034	-0.078	1.346	-1.670	1.130	1.217	0.363	1.346	-1.670	0.478
138R	0.920	0.059	1.346	-1.707	1.139	0.660	0.553	1.346	-1.707	0.424
139V	0.667	-1.162	1.599	-1.740	1.376	0.679	1.895	1.895	-1.740	0.473
140V	0.667	-1.065	1.599	-1.574	1.376	0.679	1.895	1.895	-1.574	0.511
141Q	0.218	-0.342	1.655	-1.377	1.458	0.679	2.186	2.186	-1.377	0.640
142Y	0.085	-0.833	1.225	-1.227	0.984	0.054	1.177	1.225	-1.227	0.209
143G	0.680	0.149	1.337	-1.287	0.948	0.052	0.588	1.337	-1.287	0.352
144Y	1.046	0.149	1.459	-1.463	0.957	0.051	-1.010	1.459	-1.463	0.170
145A	1.160	0.556	1.459	-1.705	0.948	0.608	-1.200	1.459	-1.705	0.261
146G	1.641	1.095	1.197	-1.875	0.665	0.589	-1.532	1.641	-1.875	0.254
147A	1.413	0.371	1.206	-1.987	0.711	0.589	-2.542	1.413	-2.542	-0.034
148E	2.166	0.371	1.225	-1.755	0.793	1.058	-2.883	2.166	-2.883	0.139
149G	1.799	0.371	1.103	-1.404	0.784	1.060	-1.284	1.799	-1.404	0.347
150A	1.571	-0.352	1.113	-2.295	0.829	1.060	-2.295	1.571	-2.295	0.140
151D	1.932	-0.448	1.440	-0.818	1.194	1.659	-1.311	1.932	-1.311	0.521
152V	1.205	-0.448	0.991	-1.047	0.820	1.061	-0.696	1.205	-1.047	0.269
153A	0.610	0.461	0.879	-1.594	0.856	1.063	-0.107	1.063	-1.594	0.310
154E	1.110	0.461	1.150	-1.668	1.175	1.552	0.894	1.552	-1.668	0.668
155V	0.743	0.377	1.309	-1.645	1.330	1.688	0.902	1.688	-1.645	0.672
156V	1.110	0.473	1.431	-1.184	1.339	1.686	-0.697	1.686	-1.184	0.594
157D	1.356	1.145	1.758	-0.932	1.713	1.729	0.476	1.758	-0.932	1.035
158R	0.996	0.281	1.431	-0.980	1.349	1.129	-0.507	1.431	-0.980	0.528
159A	1.723	-0.939	1.879	-1.266	1.722	1.727	-1.123	1.879	-1.266	0.532
160Q	1.451	-0.400	1.860	-1.598	1.713	1.727	-1.390	1.860	-1.598	0.481
161A	0.699	-0.987	1.842	-1.987	1.631	1.258	-1.049	1.842	-1.987	0.201
162E	1.065	-0.987	1.683	-1.898	1.476	1.122	-1.057	1.683	-1.898	0.201
163I	0.699	-1.023	1.561	-1.616	1.467	1.123	0.542	1.561	-1.616	0.393
164Y	0.452	0.115	1.234	-1.132	1.093	1.081	-0.631	1.234	-1.132	0.316
165D	0.952	1.335	1.505	-0.527	1.412	1.570	0.370	1.570	-0.527	0.945
166V	0.724	0.592	1.608	-0.368	1.522	1.595	0.395	1.608	-0.368	0.867
167A	1.495	1.543	2.178	-0.446	2.014	2.218	0.073	2.218	-0.446	1.296
168D	1.034	2.118	1.842	-0.833	1.786	2.204	0.176	2.204	-0.833	1.189
169R	0.813	2.118	1.720	-1.176	1.622	1.735	0.345	2.118	-1.176	1.025
170R	1.540	1.131	2.169	-1.397	1.996	2.333	-0.270	2.333	-1.397	1.071
171L	2.039	0.221	2.440	-0.971	2.315	2.822	0.731	2.822	-0.971	1.371
172S	0.825	0.425	2.103	-0.516	1.950	2.337	0.991	2.337	-0.516	1.159
173E	0.326	-0.635	1.552	0.081	1.467	1.714	1.580	1.714	-0.635	0.869
174D	0.193	-0.635	1.122	0.112	0.993	1.090	0.571	1.122	-0.635	0.492
175F	0.193	-0.635	1.122	-0.298	0.993	1.090	0.571	1.122	-0.635	0.434
176V	0.275	-0.665	1.300	-1.153	1.203	1.669	0.385	1.669	-1.153	0.431
177A	0.414	-0.773	1.244	-1.450	1.157	1.558	0.402	1.558	-1.450	0.365
178L	-0.800	-0.282	0.889	-1.595	0.847	1.075	0.846	1.075	-1.595	0.140
179E	-0.800	0.281	0.870	-1.276	0.902	1.076	1.030	1.076	-1.276	0.298
180D	-0.186	0.197	1.318	-1.000	1.285	1.117	0.605	1.318	-1.000	0.476
181L	-0.186	-0.456	1.561	-0.870	1.558	1.136	1.835	1.835	-0.870	0.654
182L	0.724	0.287	1.842	-0.785	1.704	1.150	1.440	1.842	-0.785	0.909
183Q	-0.035	1.066	1.505	-0.649	1.385	0.568	1.412	1.505	-0.649	0.750
184P	-0.035	0.251	1.505	-0.426	1.385	0.568	1.412	1.505	-0.426	0.666
185T	1.040	0.431	1.917	-0.362	1.741	1.162	0.950	1.917	-0.362	0.983
186M	1.116	-0.060	1.860	-0.509	1.713	1.159	0.837	1.860	-0.509	0.874
187D	1.369	-0.270	1.804	-0.644	1.658	1.605	0.665	1.804	-0.644	0.884
188E	1.369	-0.809	1.561	-0.819	1.385	1.586	-0.565	1.586	-0.819	0.530
189I	0.534	-0.528	1.225	-0.986	1.212	1.568	-0.284	1.568	-0.986	0.391
190D	0.933	0.652	1.234	-1.115	1.166	1.551	-1.239	1.551	-1.239	0.455
191A	0.711	0.740	1.113	-1.318	1.002	1.082	-1.070	1.113	-1.318	0.323
192I	0.629	1.367	0.935	-1.151	0.793	0.503	-0.884	1.367	-1.151	0.313
193A	1.495	1.487	1.066	-0.596	0.765	0.501	-1.206	1.495	-1.206	0.502
194S	1.224	1.487	0.786	-0.103	0.401	0.012	-1.197	1.487	-1.197	0.373
195S	0.509	1.445	0.702	0.066	0.410	0.017	0.249	1.445	0.017	0.485
196G	1.148	1.217	0.842	-0.390	0.428	0.015	-1.083	1.217	-1.083	0.311
197G	1.280	0.493	1.272	-1.218	0.902	0.640	-0.074	1.280	-1.218	0.471
198L	1.230	-0.134	1.113	-1.907	0.701	0.620	-0.234	1.230	-1.907	0.199
199A	0.585	0.562	0.842	-2.280	0.537	0.601	0.195	0.842	-2.280	0.149
200R	0.357	1.189	0.851	-2.287	0.583	0.601	-0.815	1.189	-2.287	0.069
201G	0.326	0.201	1.057	-2.116	0.784	0.621	-0.775	1.057	-2.116	0.014
202V	1.268	0.065	1.132	-1.851	0.729	0.616	-1.209	1.268	-1.851	0.107
203A	0.553	0.736	1.066	-1.475	0.683	0.620	0.052	1.066	-1.475	0.319
204T	0.617	0.532	0.832	-1.055	0.364	0.015	0.094	0.832	-1.055	0.200
205G	0.749	0.580	1.169	-0.804	0.774	0.615	0.067	1.169	-0.804	0.450
206F	0.402	0.527	1.206	-0.790	0.793	0.619	-0.087	1.206	-0.790	0.382
207T	0.901	0.606	1.477	-0.743	1.112	1.108	0.914	1.477	-0.743	0.768
208E	1.065	0.606	1.608	-0.888	1.321	1.687	0.847	1.687	-0.888	0.893
209L	0.471	0.640	1.496	-0.819	1.358	1.689	1.436	1.689	-0.819	0.896
210D	1.382	1.471	1.758	-0.774	1.558	1.705	1.225	1.758	-0.774	1.189
211E	1.495	0.728	1.860	-0.414	1.713	1.725	1.072	1.860	-0.414	1.169
212V	1.363	0.243	1.524	-0.038	1.303	1.126	1.098	1.524	-0.038	0.946
213T	1.363	0.698	1.524	0.494	1.303	1.126	1.098	1.524	0.494	1.087
214N	0.863	0.834	1.412	0.852	1.157	1.257	1.375	1.412	0.834	1.107
215G	0.503	0.716	1.328	1.032	1.066	0.676	1.621	1.621	0.503	0.992
216L	1.097	-0.026	1.440	1.000	1.030	0.675	1.032	1.440	-0.026	0.893
217H	1.148	0.083	1.571	0.954	1.248	0.697	1.155	1.571	0.083	0.979
218P	0.440	-0.332	1.262	0.445	0.984	0.674	1.213	1.262	-0.332	0.669
219G	-0.155	-0.787	1.150	-0.234	1.020	0.675	1.801	1.801	-0.787	0.496
220Q	-0.079	-1.414	1.094	-1.175	0.993	0.672	1.688	1.688	-1.414	0.254
221M	-0.446	-1.905	0.814	-2.092	0.811	0.053	2.009	2.009	-2.092	-0.108
222V	-0.446	-0.977	0.571	-2.589	0.537	0.034	0.779	0.779	-2.589	-0.299
223I	-0.673	-0.522	0.580	-2.679	0.583	0.034	-0.231	0.583	-2.679	-0.415
224V	-0.787	0.429	0.683	-2.676	0.683	0.617	-0.395	0.683	-2.676	-0.207
225A	-0.389	0.429	0.935	-2.313	0.911	0.618	-0.120	0.935	-2.313	0.010
226A	0.206	1.056	1.047	-2.019	0.875	0.617	-0.709	1.056	-2.019	0.153
227R	0.477	1.888	1.066	-1.631	0.884	0.617	-0.442	1.888	-1.631	0.408
228P	1.072	1.930	1.178	-1.418	0.847	0.615	-1.030	1.930	-1.418	0.456
229G	1.299	2.062	1.627	-1.438	1.485	1.210	0.045	2.062	-1.438	0.899
230V	1.578	1.231	1.776	-1.416	1.640	1.230	1.215	1.776	-1.416	1.036
231G	1.641	1.954	1.543	-1.216	1.321	0.625	1.257	1.954	-1.216	1.018
232K	0.926	1.123	1.216	-0.906	1.057	0.611	1.472	1.472	-0.906	0.785
233S	0.926	0.830	1.216	-0.592	1.057	0.611	1.472	1.472	-0.592	0.789
234T	0.579	-0.200	1.253	-0.684	1.075	0.615	1.318	1.318	-0.684	0.565
235L	0.850	-0.805	1.533	-0.874	1.440	1.104	1.309	1.533	-0.874	0.651

236G	-0.092	0.213	1.019	-0.894	0.756	0.514	1.495	1.495	-0.894	0.430
237L	-0.768	0.441	0.860	-0.763	0.647	0.511	1.280	1.280	-0.768	0.315
238D	-0.831	0.682	1.094	-0.667	0.966	1.116	1.238	1.238	-0.831	0.514
239F	0.161	0.998	1.328	-0.667	1.112	1.130	0.963	1.328	-0.667	0.718
240M	-0.111	0.848	1.122	-0.825	1.066	1.148	1.585	1.585	-0.825	0.691
241R	0.882	1.776	1.356	-0.401	1.212	1.163	1.310	1.776	-0.401	1.042
242S	-0.256	1.052	0.945	0.021	0.875	0.676	1.640	1.640	-0.256	0.708
243C	0.591	1.010	1.440	0.305	1.394	1.296	1.388	1.440	0.305	1.061
244S	0.990	0.860	1.608	0.274	1.522	1.899	1.711	1.899	0.274	1.266
245I	0.990	0.005	1.608	-0.151	1.522	1.899	1.711	1.899	-0.151	1.083
246R	0.313	1.185	1.449	-0.525	1.412	1.896	1.896	1.896	-0.525	1.032
247H	0.357	0.275	1.664	-0.795	1.504	1.878	-0.136	1.878	-0.795	0.678
248R	0.357	-0.140	1.664	-1.028	1.504	1.878	-0.136	1.878	-1.028	0.586
249M	0.629	-1.127	1.683	-1.262	1.513	1.878	0.131	1.878	-1.262	0.492
250A	-0.142	-0.158	1.113	-1.269	1.020	1.255	0.453	1.255	-1.269	0.325
251S	-0.857	-0.362	0.889	-1.332	0.802	0.639	0.437	0.889	-1.332	0.031
252V	-0.711	-0.643	0.608	-1.083	0.483	0.035	0.598	0.608	-1.083	-0.102
253I	-1.027	-0.661	0.533	-0.988	0.446	0.023	1.088	1.088	-1.027	-0.084
254F	-0.667	0.519	0.860	-0.795	0.811	0.623	2.072	2.072	-0.795	0.489
255S	-1.343	1.525	0.702	-0.969	0.701	0.620	1.857	1.857	-1.343	0.442
256L	-0.698	1.525	0.973	-1.085	0.866	0.638	1.428	1.525	-1.085	0.521
257E	0.168	2.305	1.561	-1.407	1.522	1.231	1.171	2.305	-1.407	0.936
258M	1.160	1.405	1.776	-1.196	1.722	1.247	1.080	1.776	-1.196	1.028
259S	1.242	1.423	1.954	-0.945	1.932	1.826	0.894	1.954	-0.945	1.190
260K	1.318	0.453	1.898	-0.628	1.905	1.823	0.780	1.905	-0.628	1.078
261S	0.591	0.435	1.449	-0.894	1.531	1.225	1.395	1.531	-0.894	0.819
262E	0.591	-0.625	1.449	-1.479	1.531	1.225	1.395	1.531	-1.479	0.584
263I	0.446	-1.404	1.730	-2.326	1.850	1.829	1.235	1.850	-2.326	0.480
264V	-0.496	-0.224	1.197	-2.749	1.221	1.240	1.605	1.605	-2.749	0.256
265M	-1.489	-0.128	0.963	-3.027	1.075	1.225	1.880	1.880	-3.027	0.071
266R	-1.571	0.562	0.786	-2.681	0.866	0.646	2.066	2.066	-2.681	0.096
267L	-0.932	-0.252	0.926	-2.163	0.884	0.644	0.734	0.926	-2.163	-0.023
268L	-0.205	0.784	1.375	-1.579	1.257	1.242	0.119	1.375	-1.579	0.428
269S	0.193	0.664	1.384	-1.244	1.212	1.225	-0.836	1.384	-1.244	0.371
270A	0.288	0.640	1.403	-1.343	1.376	1.195	-0.770	1.403	-1.343	0.398
271E	0.364	0.435	1.346	-1.849	1.349	1.191	-0.883	1.349	-1.849	0.279
272A	1.306	0.716	1.879	-2.325	1.977	1.781	-1.253	1.977	-2.325	0.583
273K	0.313	1.255	1.646	-2.795	1.832	1.766	-0.978	1.832	-2.795	0.434
274I	0.591	0.309	1.795	-2.630	1.987	1.786	0.192	1.987	-2.630	0.576
275K	0.730	1.447	1.739	-1.948	1.941	1.675	0.209	1.941	-1.948	0.828
276L	0.332	1.471	1.730	-1.055	1.987	1.692	1.164	1.987	-1.055	1.046
277S	0.237	2.303	1.711	-0.347	1.823	1.723	1.098	2.303	-0.347	1.221
278D	1.154	2.261	2.001	-0.074	1.996	1.741	0.936	2.261	-0.074	1.431
279M	1.154	1.607	1.543	-0.388	1.312	1.146	0.872	1.607	-0.388	1.035
280R	2.001	2.577	2.057	-0.724	1.777	1.765	0.436	2.577	-0.724	1.413
281S	1.325	2.303	1.898	-1.120	1.668	1.763	0.221	2.303	-1.120	1.151
282G	1.103	1.986	1.776	-1.299	1.504	1.294	0.390	1.986	-1.299	0.965
283R	2.001	1.898	2.057	-1.145	1.777	1.765	0.436	2.057	-1.145	1.256
284M	2.368	0.582	1.898	-0.401	1.622	1.630	0.428	2.368	-0.401	1.161
285S	2.589	1.187	2.019	0.730	1.786	2.099	0.259	2.589	0.259	1.524
286D	1.597	1.145	2.047	1.739	1.850	2.124	0.281	2.124	0.281	1.540
287D	1.660	0.401	1.814	2.052	1.531	1.519	0.323	2.052	0.323	1.329
288D	2.191	-0.138	2.253	1.414	1.959	2.127	0.377	2.253	-0.138	1.455
289W	1.198	0.137	2.019	0.237	1.813	2.112	0.652	2.112	0.137	1.167
290T	0.699	1.453	1.748	-0.926	1.494	1.623	-0.349	1.748	-0.926	0.820
291R	0.332	0.848	1.907	-1.751	1.649	1.759	-0.341	1.907	-1.751	0.629
292L	-0.035	0.890	2.066	-2.327	1.804	1.894	-0.333	2.066	-2.327	0.566
293A	0.332	1.670	2.038	-2.586	1.832	1.886	-0.410	2.038	-2.586	0.680
294R	0.414	1.345	1.991	-2.556	1.832	1.887	-0.291	1.991	-2.556	0.660
295R	0.642	1.387	1.889	-2.313	1.722	1.861	-0.317	1.889	-2.313	0.696
296M	0.718	1.149	1.832	-1.926	1.695	1.858	-0.430	1.858	-1.926	0.699
297S	0.996	1.263	1.982	-1.461	1.850	1.878	0.740	1.982	-1.461	1.035
298E	1.224	0.766	1.879	-1.240	1.741	1.853	0.714	1.879	-1.240	0.991
299I	1.091	-0.013	1.449	-1.159	1.267	1.228	-0.295	1.449	-1.159	0.510
300S	1.489	0.137	1.702	-1.001	1.494	1.230	-0.020	1.702	-1.001	0.719
301E	0.496	-1.043	1.468	-1.084	1.349	1.215	0.256	1.468	-1.084	0.380
302A	-0.578	-1.079	1.075	-1.000	0.938	0.620	0.533	1.075	-1.079	0.073
303P	-0.578	-0.540	1.075	-1.083	0.938	0.620	0.533	1.075	-1.083	0.138
304L	-0.357	-0.044	1.197	-1.064	1.103	1.089	0.364	1.197	-1.064	0.327
305F	-0.218	0.519	1.141	-0.723	1.057	0.978	0.382	1.141	-0.723	0.448
306I	0.060	1.303	1.290	0.094	1.212	0.998	1.551	1.551	0.060	0.930
307D	0.060	1.423	1.290	0.972	1.212	0.998	1.551	1.551	0.060	1.072
308D	1.084	1.375	1.674	2.107	1.513	1.033	1.003	2.107	1.003	1.398
309S	1.084	0.722	1.655	0.722	1.567	1.035	1.187	2.410	0.722	1.380
310P	1.919	-0.248	1.991	2.453	1.741	1.053	0.906	2.453	-0.248	1.402
311N	1.021	-0.032	1.711	1.569	1.467	0.581	0.860	1.711	-0.032	1.025
312L	0.123	-0.965	1.431	0.389	1.194	0.109	0.814	1.431	-0.965	0.442
313T	0.206	0.053	1.608	-1.000	1.403	0.689	0.628	1.608	-1.000	0.512
314M	-0.433	-0.438	1.225	-2.076	1.112	0.672	0.730	1.225	-2.076	0.113
315M	-0.610	0.507	1.356	-2.904	1.276	1.256	0.842	1.356	-2.904	0.246
316E	0.104	0.622	1.440	-3.058	1.267	1.250	-0.603	1.440	-3.058	0.146
317I	0.136	0.860	1.692	-3.101	1.750	1.825	-0.579	1.825	-3.101	0.369
318R	0.534	1.998	1.702	-2.902	1.704	1.808	-1.534	1.998	-2.902	0.473
319A	1.065	0.980	2.141	-2.724	2.132	2.415	-1.480	2.415	-2.724	0.647
320K	0.838	1.794	2.244	-2.646	2.242	2.440	-1.454	2.440	-2.646	0.780
321A	0.762	1.453	2.300	-2.632	2.269	2.444	-1.341	2.444	-2.632	0.751
322R	0.762	2.285	2.300	-2.707	2.269	2.444	-1.341	2.444	-2.707	0.859
323R	1.009	1.471	2.627	-2.649	2.643	2.486	-0.168	2.643	-2.649	1.060
324L	1.009	1.267	2.627	-2.503	2.643	2.486	-0.168	2.643	-2.503	1.051
325R	1.009	1.267	2.627	-2.250	2.643	2.486	-0.168	2.643	-2.250	1.088
326Q	1.186	1.285	2.496	-1.600	2.479	1.902	-0.280	2.496	-1.600	1.067
327K	0.338	0.590	1.982	-1.003	2.014	1.283	0.156	2.014	-1.003	0.766
328A	1.280	-0.566	2.515	-0.396	2.643	1.872	-0.214	2.643	-0.566	1.019
329N	0.433	-0.663	2.001	-0.260	2.178	1.253	0.222	2.178	-0.663	0.738
330L	-0.452	-1.368	1.533	-0.806	1.786	1.212	0.380	1.786	-1.368	0.327
331K	-1.046	-0.625	0.963	-1.685	1.139	0.619	0.904	1.139	-1.685	0.038
332L	-1.413	-1.863	0.842	-2.359	1.130	0.621	2.503	2.503	-2.359	-0.077
333I	-1.223	-1.863	0.814	-2.492	1.139	1.069	2.607	2.607	-2.492	0.007
334V	-0.762	-1.047	1.150	-1.912	1.367	1.083	2.504	2.504	-1.912	0.340
335V	-1.704	-1.156	0.618	-1.168	0.738	0.494	2.874	2.874	-1.704	0.099
336D	-0.743	-1.174	1.029	-0.660	1.103	0.531	2.602	2.602	-1.174	0.384
337Y	-0.819	-1.222	1.085	-0.635	1.130	0.534	2.716	2.716	-1.222	0.398
338L	-0.850	0.041	1.197	-1.102	1.185	0.550	2.072	2.072	-1.102	0.442
339Q	-0.288	0.872	1.515	-1.491	1.349	0.568	1.524	1.524	-1.491	0.578
340L	-0.509	1.213	1.393	-1.622	1.185	0.100	1.693	1.693	-1.622	0.493

341M	-0.028	2.249	1.132	-1.308	0.902	0.080	1.361	2.249	-1.308	0.627
342T	0.914	1.956	1.664	-0.816	1.531	0.669	0.991	1.956	-0.816	0.987
343S	0.895	2.040	1.786	-0.704	1.795	1.222	0.893	2.040	-0.704	1.132
344G	1.356	2.040	2.122	-0.957	2.023	1.236	0.790	2.122	-0.957	1.230
345K	2.115	2.227	2.459	-1.485	2.342	1.818	0.819	2.459	-1.485	1.470
346K	2.197	1.886	2.412	-1.637	2.342	1.818	0.938	2.412	-1.637	1.422
347Y	2.052	0.958	2.692	-1.580	2.661	2.423	0.777	2.692	-1.580	1.426
348E	2.071	1.940	3.029	-1.082	3.080	2.465	0.940	3.080	-1.082	1.778
349S	1.476	1.269	2.459	-0.882	2.433	1.872	1.464	2.459	-0.882	1.442
350R	1.609	1.269	2.337	-0.926	2.160	1.877	1.372	2.337	-0.926	1.385
351Q	1.495	1.030	1.963	-1.329	1.914	1.859	1.629	1.963	-1.329	1.223
352V	1.413	0.365	1.786	-1.396	1.704	1.280	1.815	1.815	-1.396	0.995
353E	1.495	1.317	1.963	-1.499	1.914	1.859	1.629	1.963	-1.499	1.240
354V	0.648	1.555	1.468	-1.050	1.394	1.239	1.881	1.881	-1.050	1.019
355S	0.680	1.742	1.290	-0.586	1.175	1.216	1.877	1.877	-0.586	1.056
356E	1.179	0.682	1.842	-0.257	1.658	1.840	1.288	1.842	-0.257	1.176
357F	0.819	0.938	1.674	0.209	1.467	1.860	1.582	1.860	0.209	1.221
358S	0.471	0.908	1.711	0.408	1.485	1.864	1.428	1.864	0.408	1.182
359R	0.421	-0.152	2.010	0.384	1.968	2.438	1.333	2.438	-0.152	1.200
360H	-0.654	-0.965	1.599	-0.002	1.613	1.844	1.794	1.844	-0.965	0.747
361L	-0.654	-0.224	1.580	-0.747	1.668	1.845	1.978	1.978	-0.747	0.778
362K	-0.932	0.556	1.431	-1.703	1.513	1.825	0.808	1.825	-1.703	0.499
363L	-0.838	-0.480	1.449	-2.188	1.677	1.795	0.874	1.795	-2.188	0.327
364L	-0.477	0.299	1.617	-2.576	1.868	1.775	0.580	1.868	-2.576	0.441
365A	-0.477	0.407	1.617	-2.549	1.868	1.775	0.580	1.868	-2.549	0.460
366K	-0.344	0.766	1.496	-2.533	1.595	1.780	0.489	1.780	-2.533	0.464
367E	0.003	-0.162	1.459	-2.529	1.576	1.776	0.643	1.776	-2.529	0.395
368L	0.718	-0.833	1.786	-2.308	1.841	1.790	0.748	1.841	-2.308	0.489
369E	0.351	-0.629	1.664	-2.034	1.832	1.791	2.027	2.027	-2.034	0.715
370V	-0.243	-1.528	1.094	-1.658	1.185	1.198	2.550	2.550	-1.658	0.371
371P	-0.604	-0.576	0.767	-1.489	0.820	0.598	1.566	1.566	-1.489	0.155
372V	-0.528	-0.444	0.711	-1.645	0.793	0.595	1.453	1.453	-1.645	0.134
373V	-0.610	-0.552	0.533	-1.755	0.583	0.015	1.639	1.639	-1.755	-0.021
374A	0.003	0.153	0.982	-1.671	0.966	0.056	1.214	1.214	-1.671	0.243
375I	-0.711	0.966	0.655	-1.359	0.701	0.043	1.429	1.429	-1.359	0.246
376S	-0.035	1.918	1.075	-0.517	1.020	0.082	0.727	1.918	-0.517	0.610
377Q	0.465	1.421	1.627	0.021	1.504	0.705	0.138	1.627	0.021	0.840
378L	0.692	1.505	1.617	0.354	1.458	0.705	1.148	1.617	0.354	1.069
379N	1.331	2.201	2.001	0.391	1.750	0.722	1.046	2.201	0.391	1.349
380R	1.413	2.405	2.178	-0.028	1.959	1.301	0.860	2.405	-0.028	1.441
381G	1.413	2.082	2.178	-0.439	1.959	1.301	0.860	2.178	-0.439	1.337
382P	2.260	1.994	2.692	-0.752	2.424	1.921	0.424	2.692	-0.752	1.566
383E	2.147	2.467	2.589	-1.076	2.269	1.900	0.578	2.589	-1.076	1.554
384Q	2.513	2.723	2.431	-0.885	2.114	1.764	0.570	2.723	-0.885	1.604
385R	2.513	2.591	2.888	-0.655	2.798	2.359	0.635	2.888	-0.655	1.876
386T	2.741	1.664	3.094	-0.476	3.162	2.935	0.480	3.162	-0.476	1.943
387D	2.381	0.968	3.010	-0.336	3.071	2.354	0.726	3.071	-0.336	1.739
388K	1.736	0.429	2.674	-0.732	2.743	2.329	0.508	2.743	-0.732	1.384
389K	0.888	0.137	2.160	-1.176	2.278	1.710	0.943	2.278	-1.176	0.991
390P	0.692	-0.899	1.963	-1.661	2.123	1.690	-0.107	2.123	-1.661	0.543
391M	0.692	-0.444	1.963	-1.770	2.123	1.690	-0.107	2.123	-1.770	0.592
392L	-0.250	0.245	1.431	-1.612	1.494	1.100	0.262	1.494	-1.612	0.382
393A	-0.344	1.305	1.412	-1.232	1.330	1.130	0.197	1.412	-1.232	0.543
394D	0.016	1.932	1.496	-1.194	1.422	1.711	-0.050	1.932	-1.194	0.762
395L	0.692	1.429	1.655	-1.098	1.531	1.714	0.165	1.714	-1.098	0.870
396R	1.634	1.429	1.730	-1.243	1.476	1.708	-0.269	1.730	-1.243	0.924
397E	1.590	1.107	1.515	-0.885	1.385	1.726	1.363	1.726	-0.885	1.114
398S	0.376	0.532	1.160	-0.653	1.075	1.243	1.807	1.807	-0.653	0.791
399G	1.287	0.532	1.440	-0.267	1.221	1.257	1.413	1.440	-0.267	0.983
400C	1.154	0.395	1.010	-0.410	0.747	0.633	0.403	1.154	-0.410	0.562
401L	1.072	1.173	0.832	-0.423	0.537	0.053	0.590	1.173	-0.423	0.548
402T	0.990	1.052	0.879	-0.502	0.537	0.053	0.471	1.052	-0.502	0.497
403A	0.895	0.357	1.318	-0.273	1.057	0.678	0.469	1.318	-0.273	0.643
404S	0.300	1.171	1.393	-0.428	1.130	0.662	0.169	1.393	-0.428	0.628
405T	0.300	0.315	1.393	-0.845	1.130	0.662	0.169	1.393	-0.845	0.446
406R	0.237	0.363	1.627	-1.727	1.449	1.266	0.127	1.627	-1.727	0.478
407I	0.237	0.041	1.627	-2.380	1.449	1.266	0.127	1.627	-2.380	0.338
408L	0.459	0.992	1.748	-2.462	1.613	1.735	-0.042	1.748	-2.462	0.578
409R	0.459	1.197	1.748	-1.911	1.613	1.735	-0.042	1.748	-1.911	0.686
410A	0.553	0.958	1.309	-1.015	1.093	1.111	-0.040	1.309	-1.015	0.567
411D	1.192	0.862	1.449	-0.392	1.112	1.109	-1.372	1.449	-1.372	0.566
412T	2.267	0.323	1.860	-0.382	1.467	1.703	-1.834	2.267	-1.834	0.772
413G	1.767	-0.342	1.309	-0.907	0.984	1.080	-1.244	1.767	-1.244	0.378
414A	1.767	-0.342	1.309	-1.531	0.984	1.080	-1.244	1.767	-1.531	0.289
415E	0.553	0.233	0.973	-1.937	0.619	0.595	-0.984	0.973	-1.937	0.008
416V	0.585	-0.546	0.767	-1.923	0.419	0.575	-1.024	0.767	-1.923	-0.164
417A	0.718	-0.564	1.175	-1.711	0.829	1.175	-1.051	1.175	-1.711	0.071
418F	0.003	0.249	1.019	-1.609	0.838	1.180	0.394	1.180	-1.609	0.296
419G	-0.755	1.279	0.683	-1.783	0.519	0.598	0.365	1.279	-1.783	0.129
420E	-0.256	1.279	1.234	-2.188	1.002	1.221	-0.224	1.279	-2.188	0.295
421L	0.022	1.279	1.384	-2.311	1.157	1.241	0.946	1.384	-2.311	0.531
422M	0.964	2.297	1.440	-2.201	1.157	1.237	0.695	2.297	-2.201	0.798
423R	1.097	2.770	1.776	-1.701	1.567	1.836	0.668	2.770	-1.701	1.145
424S	0.869	1.842	1.879	-1.347	1.677	1.861	0.694	1.879	-1.347	1.068
425G	1.584	0.890	2.206	-1.188	1.941	1.875	0.479	2.206	-1.188	1.112
426E	1.584	-0.240	2.206	-1.443	1.941	1.875	0.479	2.206	-1.443	0.915
427R	1.084	0.041	1.655	-1.604	1.458	1.252	1.068	1.655	-1.604	0.708
428P	0.041	-0.977	1.524	-1.910	1.321	1.257	0.931	1.524	-1.910	0.312
429M	0.092	-0.797	1.683	-1.777	1.522	1.277	1.090	1.683	-1.777	0.441
430V	-0.983	-0.108	1.272	-1.689	1.166	0.683	1.551	1.551	-1.689	0.270
431W	-0.616	0.802	1.113	-1.038	1.011	0.547	1.543	1.543	-1.038	0.480
432S	-0.256	1.101	1.197	-0.630	1.103	1.128	1.297	1.297	-0.630	0.706
433L	0.275	1.058	1.636	-0.257	1.531	1.735	1.351	1.735	-0.257	1.047
434D	-0.073	1.149	1.674	-0.557	1.549	1.739	1.198	1.739	-0.557	0.954
435E	0.825	0.513	2.085	-1.148	2.005	2.339	1.175	2.339	-1.148	1.113
436R	0.149	-0.062	1.926	-2.063	1.895	2.336	0.960	2.336	-2.063	0.734
437L	0.496	-0.062	1.889	-2.542	1.877	2.332	1.113	2.332	-2.542	0.729
438R	-0.003	0.501	1.617	-2.908	1.558	1.843	0.112	1.843	-2.908	0.389
439M	-0.231	-0.426	1.720	-2.874	1.668	1.868	0.138	1.868	-2.874	0.266
440V	-0.363	-0.637	1.533	-2.555	1.467	1.262	0.358	1.533	-2.555	0.152
441A	-0.047	0.069	1.608	-2.279	1.504	1.274	-0.132	1.608	-2.279	0.285
442R	-0.819	-0.028	1.038	-2.060	1.011	0.651	0.191	1.038	-2.060	-0.002
443P	-0.111	-1.015	1.346	-1.611	1.276	0.675	0.133	1.346	-1.611	0.099
444M	-0.111	-1.015	1.346	-1.278	1.276	0.675	0.133	1.346	-1.278	0.147
445I	-0.825	-0.046	1.281	-0.645	1.230	0.679	1.394	1.394	-0.825	0.438

446N	-0.958	0.906	1.094	-0.025	1.030	0.073	1.615	1.615	-0.958	0.534
447V	-0.680	1.111	1.001	0.432	0.911	0.074	1.555	1.555	-0.680	0.629
448F	-0.054	2.038	1.001	0.581	0.820	0.057	1.610	2.038	-0.054	0.865
449P	0.718	2.788	1.571	0.564	1.312	0.680	1.288	2.788	0.564	1.274
450S	0.636	2.333	1.720	-0.079	1.640	1.234	1.466	2.333	-0.079	1.278
451G	1.363	1.303	2.169	-0.771	2.014	1.832	0.851	2.169	-0.771	1.251
452R	1.710	1.489	2.113	-1.649	2.050	1.829	1.188	2.113	-1.649	1.247
453K	0.996	0.471	1.804	-2.096	1.731	1.815	1.220	1.815	-2.096	0.849
454E	0.850	0.453	2.085	-2.222	2.050	2.419	1.059	2.419	-2.222	0.956
455V	-0.092	-0.326	2.010	-2.026	2.105	2.425	1.494	2.425	-2.026	0.798
456F	-0.092	-0.230	2.010	-1.990	2.105	2.425	1.494	2.425	-1.990	0.817
457R	-1.034	0.800	1.477	-2.152	1.476	1.835	1.864	1.864	-2.152	0.610
458L	-1.394	0.614	1.150	-2.418	1.112	1.236	0.880	1.236	-2.418	0.168
459R	-0.749	1.631	1.421	-2.277	1.276	1.254	0.451	1.631	-2.277	0.430
460L	0.193	1.393	1.477	-1.945	1.276	1.250	0.200	1.477	-1.945	0.549
461A	0.193	1.501	1.477	-1.367	1.276	1.250	0.200	1.501	-1.367	0.647
462S	1.268	2.076	1.889	-1.105	1.631	1.844	-0.261	2.076	-1.105	1.049
463G	0.768	1.221	1.337	-1.262	1.148	1.221	0.328	1.337	-1.262	0.680
464R	1.843	1.084	1.748	-1.748	1.504	1.815	-0.133	1.843	-1.748	0.873
465E	1.843	0.898	1.748	-2.123	1.504	1.815	-0.133	1.843	-2.123	0.793
466V	1.761	1.179	1.795	-2.241	1.504	1.815	-0.252	1.815	-2.241	0.794
467E	1.761	1.365	1.795	-2.012	1.504	1.815	-0.252	1.815	-2.012	0.854
468A	1.906	1.149	1.515	-1.421	1.185	1.211	-0.091	1.906	-1.421	0.779
469T	1.546	0.974	1.346	-0.514	0.993	1.231	0.202	1.546	-0.514	0.826
470G	1.913	0.369	1.711	0.550	1.276	1.248	-0.166	1.913	-0.166	0.986
471S	0.838	0.574	1.318	1.496	0.866	0.653	0.111	1.496	0.111	0.836
472H	0.440	-0.456	1.309	1.725	0.911	0.670	1.066	1.725	-0.456	0.809
473P	0.471	0.029	1.561	1.049	1.394	1.245	1.090	1.561	0.029	0.977
474F	-0.471	0.297	1.505	-0.054	1.394	1.249	1.341	1.505	-0.471	0.752
475M	-0.389	-0.032	1.683	-1.149	1.604	1.828	1.155	1.828	-1.149	0.672
476K	-0.161	0.574	1.515	-1.736	1.385	1.209	0.888	1.515	-1.736	0.525
477F	-0.926	0.101	1.290	-1.841	1.130	1.215	0.690	1.290	-1.841	0.237
478E	-0.016	0.071	1.552	-1.734	1.330	1.231	0.480	1.552	-1.734	0.416
479G	0.383	-0.504	1.804	-1.474	1.558	1.232	0.755	1.804	-1.474	0.536
480W	-0.559	-0.641	1.272	-1.195	0.929	0.643	1.125	1.272	-1.195	0.225
481T	0.155	-0.342	1.337	-1.001	0.975	0.639	-0.136	1.337	-1.001	0.232
482P	0.041	-0.001	1.337	-0.891	0.984	0.082	0.053	1.337	-0.891	0.229
483L	-0.901	-0.456	1.262	-1.122	1.039	0.087	0.488	1.262	-1.122	0.057
484A	0.092	0.375	1.692	-1.414	1.658	0.657	0.531	1.692	-1.414	0.513
485Q	-0.471	0.914	1.375	-1.735	1.494	0.638	1.079	1.494	-1.735	0.471
486L	-0.243	1.237	1.122	-1.991	1.175	0.619	0.859	1.237	-1.991	0.397
487K	0.971	1.117	1.477	-1.814	1.485	1.103	0.415	1.485	-1.814	0.679
488V	1.103	0.285	1.907	-1.520	1.959	1.727	1.424	1.959	-1.520	0.984
489G	0.218	0.381	1.440	-1.186	1.567	1.687	1.583	1.687	-1.186	0.813
490D	0.933	0.113	1.524	-1.129	1.558	1.681	0.138	1.681	-1.129	0.688
491R	0.705	0.387	1.075	-1.495	0.920	1.087	-0.938	1.087	-1.495	0.249
492I	1.072	0.387	1.440	-1.865	1.203	1.104	-1.306	1.440	-1.865	0.291
493A	0.977	0.616	1.879	-1.966	1.722	1.307	-1.307	1.879	-1.966	0.521
494A	0.610	0.974	2.038	-1.882	1.877	1.865	-1.299	2.038	-1.882	0.598
495P	0.111	1.549	1.487	-1.748	1.394	1.242	-0.710	1.549	-1.748	0.475
496R	0.749	1.870	1.870	-1.686	1.686	1.259	-0.812	1.870	-1.686	0.659
497R	1.110	0.411	2.197	-1.779	2.050	1.858	0.172	2.197	-1.779	0.860
498V	1.110	0.137	2.440	-1.453	2.324	1.877	1.402	2.440	-1.453	1.120
499P	0.471	0.724	2.057	-1.301	2.032	1.860	1.504	2.057	-1.301	1.050
500E	0.838	0.856	1.898	-0.835	1.877	1.724	1.496	1.898	-0.835	1.122
501P	0.901	1.095	1.664	-0.604	1.558	1.120	1.538	1.664	-0.604	1.039
502I	1.514	0.622	2.113	-0.194	1.941	1.160	1.112	2.113	-0.194	1.181
503D	1.647	1.305	2.300	-0.100	2.142	1.766	0.891	2.300	-0.100	1.422
504T	0.888	1.341	1.963	-0.213	1.823	1.184	0.862	1.963	-0.213	1.121
505Q	0.888	1.706	1.963	-0.773	1.823	1.184	0.862	1.963	-0.773	1.093
506R	1.887	1.790	2.431	-1.288	2.205	1.782	0.514	2.431	-1.288	1.332
507M	1.666	0.772	2.309	-1.423	2.041	1.313	0.683	2.309	-1.423	1.052
508P	1.830	0.562	2.440	-1.184	2.251	1.892	0.616	2.440	-1.184	1.201
509E	0.869	1.058	2.029	-0.846	1.886	1.855	0.888	2.029	-0.846	1.106
510S	0.098	0.279	1.459	-0.964	1.394	1.232	1.210	1.459	-0.964	0.673
511E	0.775	-0.576	1.617	-1.123	1.504	1.235	1.425	1.617	-1.123	0.694
512L	0.060	-0.338	1.290	-1.568	1.239	1.222	1.640	1.640	-1.568	0.507
513I	-0.300	-0.248	0.963	-1.493	0.875	0.622	0.657	0.963	-1.493	0.154
514S	-0.446	-0.248	1.244	-1.570	1.194	1.227	0.496	1.244	-1.570	0.271
515L	-1.204	-0.476	0.907	-1.691	0.875	0.644	0.467	0.907	-1.691	-0.068
516A	-1.128	0.267	0.851	-2.226	0.847	0.641	0.354	0.851	-2.226	-0.056
517R	-0.262	0.894	0.982	-2.651	0.820	0.639	0.032	0.982	-2.651	0.065
518M	-0.041	0.936	1.103	-2.713	0.984	1.108	-0.136	1.108	-2.713	0.177
519I	0.901	1.087	1.178	-2.177	0.929	1.102	-0.571	1.178	-2.177	0.350
520G	1.179	1.207	1.328	-1.128	1.084	1.122	0.599	1.328	-1.128	0.770
521D	1.002	1.411	0.683	-0.104	0.519	0.516	1.222	1.411	-0.104	0.750
522G	0.686	1.481	0.608	0.516	0.483	0.504	1.712	1.712	0.483	0.856
523S	1.552	1.345	1.197	0.484	1.139	1.097	1.456	1.552	0.484	1.181
524C	1.634	0.848	1.505	0.392	1.494	1.137	1.342	1.634	0.392	1.193
525L	1.382	0.487	1.561	0.116	1.549	0.691	1.514	1.561	0.116	1.043
526K	1.154	1.505	1.814	0.507	1.868	0.710	1.734	1.868	0.507	1.327
527N	0.237	0.267	1.524	0.648	1.695	0.691	1.896	1.896	0.237	0.994
528Q	0.414	0.233	2.169	0.447	2.260	1.298	1.273	2.260	0.233	1.156
529P	0.876	0.101	2.505	-0.337	2.488	1.312	1.170	2.505	-0.337	1.159
530I	1.009	-0.354	2.384	-1.220	2.214	1.317	1.079	2.384	-1.220	0.918
531R	0.699	0.509	2.328	-1.823	2.178	1.296	1.412	2.328	-1.823	0.943
532Y	0.085	0.271	1.879	-1.754	1.795	1.255	1.837	1.879	-1.754	0.767
533E	0.585	0.678	1.907	-1.216	1.841	1.725	1.608	1.907	-1.216	1.018
534P	1.584	0.712	2.374	-0.715	2.224	2.322	1.260	2.374	-0.715	1.394
535V	1.451	0.149	1.945	-0.365	1.750	1.698	0.251	1.945	-0.365	0.983
536D	2.014	0.245	1.991	-0.064	1.823	1.719	-0.194	2.014	-0.194	1.076
537E	0.939	-0.294	1.580	0.091	1.467	1.125	0.267	1.580	-0.294	0.739
538A	0.939	-0.965	1.337	0.162	1.194	1.106	-0.963	1.337	-0.965	0.401
539N	1.306	-0.474	1.459	0.066	1.203	1.104	-2.562	1.459	-2.562	0.300
540L	0.440	-1.180	1.066	-0.522	0.875	0.617	-1.964	1.066	-1.964	-0.095
541A	0.275	-0.120	0.935	-1.117	0.665	0.037	-1.897	0.935	-1.897	-0.174
542A	-0.092	-0.120	0.814	-1.491	0.656	0.039	-0.298	0.814	-1.491	-0.070
543V	-0.123	-0.120	0.664	-1.460	0.501	0.018	-0.025	0.664	-1.460	-0.078
544T	0.591	0.067	0.748	-1.040	0.492	0.013	-1.470	0.748	-1.470	-0.086
545V	0.591	0.431	0.748	-0.691	0.492	0.013	-1.470	0.748	-1.470	0.016
546S	0.591	1.066	0.907	-0.321	0.665	0.633	-0.193	1.066	-0.321	0.478
547A	1.236	1.024	1.178	0.136	0.829	0.651	-0.622	1.236	-0.622	0.633
548A	1.540	1.024	1.253	0.872	0.993	1.120	-0.672	1.540	-0.672	0.876
549H	2.039	1.024	1.804	1.553	1.476	1.743	-1.261	2.039	-1.261	1.197
550S	1.761	0.610	1.655	1.631	1.321	1.723	-2.431	1.761	-2.431	0.896

551D	1.761	0.568	1.655	0.918	1.321	1.723	-2.431	1.761	-2.431	0.788
552R	1.122	0.568	1.515	-0.306	1.303	1.725	-1.099	1.725	-1.099	0.690
553A	1.255	0.293	1.786	-1.653	1.604	1.730	-1.368	1.786	-1.653	0.521
554A	1.476	-0.114	1.907	-2.107	1.768	2.199	-1.536	2.199	-2.107	0.513
555I	1.476	-0.318	1.907	-1.814	1.768	2.199	-1.536	2.199	-1.814	0.526
556R	1.091	0.007	1.730	-0.828	1.531	1.594	-1.203	1.730	-1.203	0.560
557D	0.376	-0.807	1.646	0.061	1.540	1.599	0.242	1.646	-0.807	0.665
558D	0.376	-0.532	1.646	0.309	1.540	1.599	0.242	1.646	-0.532	0.740
559Y	1.015	-1.168	1.786	-0.221	1.558	1.597	-1.090	1.786	-1.168	0.497
560L	1.015	-0.402	1.786	-1.125	1.558	1.597	-1.090	1.786	-1.125	0.477
561A	0.149	0.658	1.393	-1.935	1.230	1.110	-0.492	1.393	-1.935	0.302
562A	-0.351	0.453	1.365	-2.168	1.185	0.640	-0.264	1.365	-2.168	0.123
563R	0.180	1.267	1.262	-1.752	1.103	0.641	-0.436	1.267	-1.752	0.323
564V	0.180	0.812	1.262	-1.124	1.103	0.641	-0.436	1.262	-1.124	0.348
565P	0.313	0.908	1.692	-0.596	1.576	1.265	0.573	1.692	-0.596	0.819
566S	0.313	1.363	1.935	-0.401	1.850	1.284	1.803	1.935	-0.401	1.164
567L	0.180	0.998	1.505	-0.669	1.376	0.660	0.794	1.505	-0.669	0.692
568R	0.680	2.016	2.057	-1.072	1.859	1.283	0.205	2.057	-1.072	1.004
569P	0.926	0.998	2.141	-1.333	1.959	1.306	0.148	2.141	-1.333	0.878
570A	0.781	0.998	2.421	-1.582	2.278	1.911	-0.013	2.421	-1.582	0.971
571R	0.781	1.812	2.421	-1.714	2.278	1.911	-0.013	2.421	-1.714	1.068
572Q	0.648	1.625	2.234	-1.713	2.078	1.305	0.208	2.234	-1.713	0.912
573R	0.781	1.948	2.421	-1.787	2.278	1.911	-0.013	2.421	-1.787	1.077
574L	1.009	1.171	2.412	-1.640	2.233	1.911	0.998	2.412	-1.640	1.156
575P	1.009	1.866	2.412	-1.615	2.233	1.911	0.998	2.412	-1.615	1.259
576R	0.718	1.866	1.870	-1.568	1.768	1.886	1.457	1.886	-1.568	1.142
577G	0.781	0.728	1.636	-1.429	1.449	1.281	1.498	1.636	-1.429	0.849
578R	1.495	0.101	1.963	-0.931	1.713	1.295	1.283	1.963	-0.931	0.989
579C	0.857	-0.713	1.580	-0.624	1.422	1.278	1.385	1.580	-0.713	0.741
580T	0.724	-1.252	1.150	-0.413	0.948	0.653	0.376	1.150	-1.252	0.312
581P	0.496	-1.947	1.160	-0.832	0.993	0.653	-0.635	1.160	-1.947	-0.016
582I	-0.401	-2.306	0.748	-1.426	0.537	0.054	-0.612	0.748	-2.306	-0.486
583A	-1.072	-1.354	0.879	-2.070	0.638	0.041	-0.799	0.879	-2.070	-0.534
584A	-1.268	-1.558	0.683	-2.337	0.483	0.021	-0.113	0.683	-2.337	-0.832
585W	-1.040	-0.931	0.431	-2.431	0.164	0.002	-2.069	0.431	-2.431	-0.839
586L	-1.116	-0.633	0.487	-2.332	0.191	0.006	-1.956	0.487	-2.332	-0.765
587A	-0.888	-0.603	0.477	-2.233	0.146	0.006	-0.946	0.477	-2.233	-0.577
588G	-1.603	-0.112	0.393	-2.178	0.155	0.011	0.499	0.499	-2.178	-0.405
589L	-1.552	0.093	0.309	-2.020	0.091	-0.010	0.728	0.728	-2.020	-0.337
590G	-0.642	1.111	0.589	-1.773	0.237	0.005	0.334	1.111	-1.773	-0.020
591L	-0.414	1.339	1.038	-1.481	0.875	0.599	1.409	1.409	-1.481	0.481
592F	-0.509	1.633	1.477	-1.312	1.394	1.224	1.408	1.633	-1.312	0.760
593T	0.484	2.383	1.711	-1.113	1.540	1.239	1.133	2.383	-1.113	1.054
594K	0.256	2.723	1.879	-0.740	1.759	1.859	1.400	2.723	-0.740	1.305
595R	1.331	1.928	2.290	-0.169	2.114	2.453	0.939	2.453	-0.169	1.555
596S	2.273	1.018	2.804	0.403	2.798	3.043	0.753	3.043	0.403	1.870
597H	2.033	0.521	2.393	0.609	2.552	3.041	1.334	3.041	0.521	1.783
598E	1.438	1.006	1.823	0.197	1.905	2.448	1.858	2.448	0.197	1.525
599K	1.306	0.431	1.636	-0.257	1.704	1.842	2.079	2.079	-0.257	1.249
600C	1.388	-0.496	1.814	-0.665	1.914	2.422	1.893	2.422	-0.665	1.181
601V	1.388	-0.707	1.655	-0.868	1.741	1.802	0.615	1.802	-0.868	0.804
602P	0.661	0.203	1.206	-1.056	1.367	1.204	1.230	1.367	-1.056	0.688
603E	-0.281	-0.156	0.692	-1.259	0.683	0.613	1.416	1.416	-1.259	0.244
604A	-0.104	-0.372	1.337	-1.637	1.248	1.220	0.793	1.337	-1.637	0.355
605V	0.263	0.237	1.459	-1.684	1.257	1.219	-0.806	1.459	-1.684	0.278
606F	0.263	0.872	1.459	-1.660	1.257	1.219	-0.806	1.459	-1.660	0.372
607R	0.212	1.537	1.431	-1.053	1.203	0.660	-0.892	1.537	-1.053	0.442
608A	0.711	0.628	1.702	-0.062	1.522	1.149	0.109	1.702	-0.062	0.823
609P	1.325	0.628	2.150	1.204	1.905	1.190	-0.317	2.150	-0.317	1.155
610N	1.672	0.065	2.094	1.928	1.941	1.187	0.021	2.094	0.021	1.273
611D	1.540	-0.719	1.664	1.762	1.467	0.562	-0.988	1.762	-0.988	0.755
612Q	0.825	-1.462	1.580	0.647	1.476	0.568	0.457	1.580	-1.462	0.584
613V	0.111	-1.140	1.272	-0.563	1.157	0.553	0.488	1.272	-1.140	0.268
614A	-0.913	-0.953	0.889	-1.499	0.856	0.518	1.036	1.036	-1.499	-0.010
615L	-1.280	-1.158	1.047	-1.828	1.011	0.654	1.044	1.047	-1.828	-0.073
616F	-1.527	-1.456	0.879	-1.525	0.811	1.231	1.148	1.231	-1.527	-0.063
617L	-1.874	-0.426	0.917	-1.164	0.829	1.235	0.994	1.235	-1.874	0.073
618R	-2.639	-0.222	0.935	-0.723	0.847	1.260	2.027	2.027	-2.639	0.212
619H	-1.647	-0.408	1.169	-0.327	0.993	1.275	1.751	1.751	-1.647	0.401
620L	-0.932	0.129	1.234	-0.328	1.039	1.270	0.490	1.270	-0.932	0.415
621W	0.010	1.189	1.309	-0.458	0.984	1.265	0.056	1.309	-0.458	0.622
622S	0.104	1.595	0.870	-0.633	0.465	0.640	0.057	1.595	-0.633	0.443
623A	0.383	1.553	0.860	-0.792	0.446	0.041	-0.051	1.553	-0.792	0.349
624G	0.730	1.050	0.823	-0.782	0.428	0.037	0.103	1.050	-0.782	0.341
625G	1.628	0.962	1.234	-0.703	0.884	0.636	0.080	1.628	-0.703	0.675
626S	0.585	0.694	1.103	-0.956	0.747	0.641	-0.058	1.103	-0.956	0.394
627V	1.084	0.329	1.375	-0.996	1.066	1.130	0.943	1.375	-0.996	0.705
628R	0.857	1.034	1.627	-1.003	1.385	1.149	1.163	1.627	-1.003	0.888
629W	0.825	0.848	1.832	-0.500	1.586	1.169	1.203	1.832	-0.500	0.995
630D	0.857	1.842	1.982	0.420	1.741	1.190	0.931	1.982	0.420	1.280
631P	1.451	1.930	2.094	1.243	1.704	1.188	0.342	2.094	0.342	1.422
632T	1.565	2.385	1.991	1.702	1.604	0.606	0.506	2.385	0.506	1.480
633N	2.558	1.798	1.963	1.492	1.540	0.581	0.484	2.558	0.484	1.488
634G	2.191	0.782	2.122	0.672	1.695	0.716	0.493	2.191	0.493	1.239
635Q	1.824	-0.252	1.758	-0.377	1.412	0.699	0.861	1.824	-0.377	0.847
636G	1.375	-0.116	1.814	-1.185	1.494	0.698	1.153	1.814	-1.185	0.748
637R	0.813	0.113	1.767	-1.785	1.422	0.677	1.598	1.767	-1.785	0.658
638V	0.813	-0.210	1.767	-1.769	1.422	0.677	1.598	1.767	-1.769	0.614
639Y	0.844	0.742	1.589	-1.406	1.203	0.655	1.594	1.594	-1.406	0.746
640Y	0.813	1.962	1.795	-0.878	1.403	0.675	1.635	1.962	-0.878	1.058
641G	0.958	3.182	1.515	-0.102	1.084	0.070	1.795	3.182	-0.102	1.215
642S	1.457	2.351	2.066	0.353	1.567	0.693	1.206	2.351	0.353	1.385
643T	1.843	1.171	2.244	0.414	1.804	1.299	0.873	2.244	0.414	1.378
644S	1.382	1.219	1.907	-0.179	1.576	1.285	0.976	1.907	-0.179	1.166
645R	0.515	0.902	1.776	-1.117	1.604	1.286	1.297	1.776	-1.117	0.895
646R	0.737	-0.007	1.898	-1.813	1.768	1.755	1.128	1.898	-1.813	0.781
647L	1.040	-0.821	1.973	-1.661	1.932	2.224	1.079	2.224	-1.661	0.824
648I	0.395	-0.126	1.702	-0.996	1.768	2.206	1.508	2.206	-0.996	0.922
649D	0.263	-0.005	1.272	-0.141	1.294	1.581	0.498	1.581	-0.141	0.680
650D	0.376	-0.749	1.169	0.185	1.194	0.999	0.662	1.194	-0.749	0.548
651V	0.376	-1.492	1.169	-0.241	1.194	0.999	0.662	1.194	-1.492	0.381
652A	0.300	-0.583	1.225	-0.876	1.221	1.002	0.776	1.225	-0.876	0.438
653Q	-0.913	-0.679	0.870	-1.570	0.911	0.519	1.220	1.220	-1.570	0.051
654L	-1.280	-0.542	1.029	-2.069	1.066	0.655	1.228	1.228	-2.069	0.012
655L	-1.280	-0.663	1.029	-2.343	1.066	0.655	1.228	1.228	-2.343	-0.044

656L	-1.053	-0.633	1.019	-2.480	1.020	0.655	2.238	2.238	-2.480	0.110
657R	-1.938	0.427	0.552	-2.589	0.629	0.614	2.397	2.397	-2.589	0.013
658V	-1.938	-0.889	0.571	-2.404	0.574	0.613	2.213	2.213	-2.404	-0.180
659G	-0.945	-1.117	0.804	-1.990	0.720	0.628	1.938	1.938	-1.990	0.005
660I	-0.996	-1.254	0.907	-1.487	0.729	0.647	1.525	1.525	-1.487	0.010
661F	-1.767	-0.839	0.337	-1.053	0.237	0.025	1.847	1.847	-1.767	-0.173
662S	-1.204	-0.665	0.655	-0.865	0.401	0.043	1.299	1.299	-1.204	-0.048
663W	-1.432	-1.162	0.823	-0.722	0.619	0.663	1.566	1.566	-1.432	0.051
664I	-0.793	0.173	0.963	-0.532	0.638	0.661	0.235	0.963	-0.793	0.192
665T	-0.079	0.293	1.272	0.041	0.957	0.676	0.203	1.272	-0.079	0.480
666H	-0.129	0.429	1.571	0.299	1.440	1.250	0.109	1.571	-0.129	0.710
667A	-0.079	0.966	1.468	0.187	1.431	1.230	0.521	1.468	-0.079	0.818
668P	0.787	1.056	1.599	-0.493	1.403	1.229	0.200	1.599	-0.493	0.826
669K	0.819	1.237	1.393	-1.226	1.203	1.209	0.160	1.393	-1.226	0.685
670L	0.819	1.261	1.393	-1.421	1.203	1.209	0.160	1.393	-1.421	0.660
671G	1.318	0.962	1.664	-0.696	1.522	1.698	1.161	1.698	-0.696	1.090
672G	1.597	1.149	1.571	0.502	1.403	1.699	1.101	1.699	0.502	1.289
673H	0.604	0.317	1.141	1.531	0.784	1.129	1.058	1.531	0.317	0.938
674D	1.451	0.317	1.655	1.759	1.248	1.749	0.622	1.759	0.317	1.257
675S	0.509	-0.546	1.580	0.889	1.303	1.057	1.754	1.754	-0.546	0.935
676W	0.281	-1.312	1.748	0.016	1.522	2.374	1.324	2.374	-1.312	0.850
677R	-0.357	-0.182	1.449	-0.836	1.330	1.756	1.378	1.756	-0.836	0.648
678L	-0.857	-0.995	1.337	-0.439	1.185	1.887	1.654	1.887	-0.995	0.539
679H	-0.907	0.041	1.178	0.042	0.984	1.867	1.495	1.867	-0.907	0.671
680I	-0.142	0.489	1.160	0.557	0.966	1.841	0.462	1.841	-0.142	0.762
681H	-0.047	1.305	1.178	0.286	1.130	1.811	0.528	1.811	-0.047	0.885
682G	1.167	1.119	1.533	-0.009	1.440	2.295	0.084	2.295	-0.009	1.090
683A	1.413	1.305	1.702	-0.577	1.640	1.717	-0.020	1.717	-0.577	1.026
684K	1.685	1.131	1.720	-0.437	1.649	1.717	0.247	1.720	-0.437	1.102
685D	1.818	0.095	1.991	-0.557	1.950	1.722	-0.021	1.991	-0.557	1.000
686Q	0.876	0.369	1.935	-0.587	1.950	1.726	0.230	1.950	-0.587	0.928
687V	0.161	-0.032	1.851	-1.054	1.959	1.732	1.675	1.959	-1.054	0.899
688R	0.067	-0.032	1.832	-1.471	1.795	1.762	1.609	1.832	-1.471	0.795
689F	-0.433	-0.218	1.720	-1.483	1.649	1.893	1.886	1.893	-1.483	0.716
690L	-1.046	-0.140	1.272	-1.183	1.267	1.852	2.311	2.311	-1.183	0.619
691R	-0.452	0.155	1.384	-0.639	1.230	1.850	1.723	1.850	-0.639	0.750
692H	-0.951	-0.032	0.832	-0.396	0.747	1.227	2.312	2.312	-0.951	0.534
693V	-0.237	-0.122	1.057	-0.208	0.966	1.843	2.328	2.328	-0.237	0.804
694G	0.705	0.550	1.132	-0.250	0.911	1.837	1.894	1.894	-0.250	0.968
695V	0.572	-0.078	0.702	-0.018	0.437	1.213	0.884	1.213	-0.078	0.530
696H	0.933	-0.078	0.870	-0.193	0.629	1.192	0.591	1.192	-0.193	0.563
697G	1.299	-0.168	0.991	-0.470	0.638	1.191	-1.008	1.299	-1.008	0.353
698A	0.705	-0.795	0.879	-1.209	0.674	1.192	-0.420	1.192	-1.209	0.147
699E	1.072	-0.304	1.001	-1.768	0.683	1.191	-2.018	1.191	-2.018	-0.021
700A	1.072	-0.304	0.842	-2.219	0.510	0.571	-3.296	1.072	-3.296	-0.403
701V	1.091	-0.418	1.178	-2.116	0.929	0.613	-3.133	1.178	-3.133	-0.265
702A	1.451	-0.526	1.505	-1.975	1.294	1.213	-2.149	1.505	-2.149	0.116
703A	0.692	0.287	1.169	-1.876	0.975	0.631	-2.178	1.169	-2.178	-0.043
704Q	-0.022	0.778	1.085	-1.955	0.984	0.636	-0.733	1.085	-1.955	0.110
705E	0.477	0.083	1.636	-2.237	1.467	1.259	-1.323	1.636	-2.237	0.195
706M	0.724	0.339	1.963	-2.440	1.841	1.301	-0.149	1.963	-2.440	0.511
707L	0.010	1.080	1.879	-2.477	1.850	1.307	1.296	1.879	-2.477	0.706
708R	-0.009	1.644	2.001	-2.331	2.114	1.859	1.198	2.114	-2.331	0.925
709Q	-0.142	0.734	1.664	-2.128	1.704	1.260	1.224	1.704	-2.128	0.616
710L	0.256	1.056	1.917	-1.863	1.932	1.261	1.499	1.932	-1.863	0.866
711K	0.604	1.870	1.879	-1.708	1.914	1.258	1.653	1.914	-1.708	1.067
712G	0.604	1.397	1.879	-1.483	1.914	1.258	1.653	1.914	-1.483	1.032
713P	0.667	1.379	1.851	-1.011	1.850	1.256	1.377	1.851	-1.011	1.053
714V	1.382	0.816	2.178	-0.431	2.114	1.269	1.162	2.178	-0.431	1.213
715R	1.464	1.451	2.029	0.694	1.786	0.715	0.984	2.029	0.694	1.303
716N	0.522	1.493	1.954	1.589	1.841	0.721	1.419	1.954	0.522	1.363
717P	1.021	0.884	1.982	2.335	1.886	1.191	1.190	2.335	0.884	1.498
718N	1.666	0.884	2.253	2.401	2.050	1.209	0.761	2.401	0.761	1.603
719L	1.533	1.107	1.823	2.099	1.576	0.584	-0.249	2.099	-0.249	1.211
720D	1.224	2.142	1.767	1.461	1.540	0.563	0.084	2.142	0.084	1.254
721S	1.451	1.507	1.973	0.917	1.905	1.138	-0.070	1.973	-0.070	1.260
722A	1.369	0.149	2.122	0.047	2.233	1.692	0.108	2.233	0.047	1.103
723P	1.717	0.149	2.085	-0.703	2.214	1.689	0.261	2.214	-0.703	1.059
724K	0.452	0.281	1.832	-1.529	1.914	1.225	0.293	1.914	-1.529	0.638
725K	0.174	-0.647	1.683	-2.112	1.759	1.205	-0.877	1.759	-2.112	0.169
726V	0.421	-0.665	2.010	-2.178	2.132	1.247	0.296	2.132	-2.178	0.466
727W	0.054	0.041	1.646	-2.145	1.850	1.230	0.665	1.850	-2.145	0.477
728A	-0.041	1.357	1.627	-1.923	1.686	1.260	0.599	1.686	-1.923	0.652
729Q	0.041	1.153	1.477	-1.371	1.358	0.706	0.421	1.477	-1.371	0.541
730V	0.541	1.517	2.029	-0.960	1.841	1.329	-0.169	2.029	-0.960	0.875
731R	0.591	1.613	1.926	-0.467	1.832	1.309	0.244	1.926	-0.467	1.007
732N	0.869	1.631	2.075	-0.123	1.987	1.329	1.414	2.075	-0.123	1.312
733R	0.623	1.513	1.748	-0.194	1.613	1.287	0.240	1.748	-0.194	0.976
734L	1.217	0.586	2.318	-0.489	2.260	1.880	-0.283	2.318	-0.489	1.070
735S	1.331	0.676	2.216	-0.693	2.160	1.298	-0.119	2.216	-0.693	0.981
736A	0.623	0.359	1.907	-1.230	1.895	1.274	-0.061	1.907	-1.230	0.681
737K	0.092	0.035	1.468	-1.605	1.467	0.667	-0.116	1.468	-1.605	0.287
738Q	1.306	-0.306	1.823	-1.742	1.777	1.150	-0.560	1.823	-1.742	0.493
739M	0.389	-1.001	1.533	-1.935	1.604	1.132	-0.398	1.604	-1.935	0.189
740M	0.636	-0.797	1.860	-1.587	1.977	1.174	0.776	1.977	-1.587	0.577
741D	-0.307	-0.108	1.328	-1.358	1.349	0.585	1.146	1.349	-1.358	0.377
742I	-0.553	-0.288	1.160	-0.905	1.148	1.163	1.250	1.250	-0.905	0.425
743Q	0.206	0.527	1.496	-0.640	1.467	1.745	1.279	1.745	-0.640	0.869
744L	0.604	-0.078	1.748	-0.031	1.695	1.747	1.554	1.748	-0.078	1.034
745H	0.300	-0.376	1.674	0.182	1.531	1.278	1.603	1.674	-0.376	0.885
746E	0.541	0.365	1.804	0.280	1.595	1.293	1.227	1.804	0.280	1.015
747P	-0.471	-0.120	1.496	-0.262	1.239	1.276	1.086	1.496	-0.471	0.606
748T	0.471	0.377	2.029	-0.932	1.868	1.865	0.716	2.029	-0.932	0.913
749M	0.471	0.245	2.029	-1.403	1.868	1.865	0.716	2.029	-1.403	0.827
750W	0.389	1.215	1.851	-1.063	1.658	1.286	0.902	1.851	-1.063	0.891
751K	0.389	2.531	1.851	-0.108	1.658	1.286	0.902	2.531	-0.108	1.216
752H	0.471	2.555	1.804	1.067	1.658	1.286	1.021	2.555	0.471	1.409
753S	1.002	3.278	2.244	1.699	2.087	1.893	1.075	3.278	1.002	1.897
754P	2.045	2.782	2.374	1.678	2.224	1.888	1.213	2.782	1.213	2.029
755S	1.951	2.513	2.356	1.043	2.060	1.317	1.147	2.513	1.043	1.855
756R	1.951	2.471	2.440	0.388	2.160	1.317	1.099	2.471	0.388	1.689
757S	1.672	1.658	2.449	0.230	2.178	1.917	1.207	2.449	0.230	1.616
758R	1.805	1.377	2.523	0.360	2.379	0.986	1.099	2.636	0.360	1.724
759P	1.527	0.564	2.487	0.470	2.224	2.503	-0.184	2.503	-0.184	1.370
760H	1.755	1.018	2.384	0.323	2.114	2.478	-0.209	2.478	-0.209	1.409

761R	1.476	0.604	2.234	-0.470	1.959	2.458	-1.379	2.458	-1.379	0.983
762A	1.476	0.365	2.234	-1.349	1.959	2.458	-1.379	2.458	-1.379	0.824
763E	0.838	0.904	1.851	-2.110	1.668	2.440	-1.277	2.440	-2.110	0.616
764A	1.198	1.143	2.019	-2.658	1.859	2.420	-1.571	2.420	-2.658	0.630
765R	1.565	1.143	1.860	-2.476	1.704	2.284	-1.579	2.284	-2.476	0.643
766I	1.698	0.005	2.290	-2.189	2.178	2.909	-0.570	2.909	-2.189	0.903
767E	1.337	0.419	1.963	-1.625	1.813	2.309	-1.554	2.309	-1.625	0.666
768D	0.699	0.419	1.823	-1.397	1.795	2.311	-0.222	2.311	-1.397	0.775
769R	0.566	-0.324	1.552	-1.122	1.494	2.306	0.046	2.306	-1.122	0.646
770A	1.565	-1.138	2.019	-1.133	1.877	2.904	-0.302	2.904	-1.138	0.828
771I	0.490	-0.324	1.608	-0.845	1.522	2.310	0.160	2.310	-0.845	0.703
772H	-0.009	0.628	1.337	-0.847	1.203	1.821	-0.842	1.821	-0.847	0.470
773E	-0.009	1.076	1.337	-1.003	1.203	1.821	-0.842	1.821	-1.003	0.512
774L	0.218	0.501	1.328	-1.589	1.157	1.821	0.169	1.821	-1.589	0.515
775A	1.356	0.299	1.739	-1.687	1.494	2.308	-0.162	2.308	-1.687	0.764
776R	1.356	-0.204	1.580	-1.656	1.321	1.688	-1.439	1.688	-1.656	0.378
777G	0.743	-0.478	1.505	-1.016	1.194	1.108	-1.081	1.505	-1.081	0.282
778D	0.692	-0.615	1.608	-0.702	1.203	1.128	-1.494	1.608	-1.494	0.260
779A	1.192	-1.250	1.879	-0.502	1.522	1.617	-0.492	1.879	-1.250	0.566
780Y	1.255	-1.346	1.646	-0.481	1.203	1.012	-0.451	1.646	-1.346	0.405
781W	0.661	-0.364	1.533	-0.285	1.239	1.014	0.138	1.533	-0.364	0.562
782D	-0.205	-0.186	1.141	-0.291	0.911	0.526	0.735	1.141	-0.291	0.376
783T	0.155	-0.234	1.468	-0.461	1.276	1.126	1.719	1.719	-0.461	0.721
784V	-0.231	0.131	1.075	-1.182	1.020	1.108	1.709	1.709	-1.182	0.519
785V	0.730	-0.098	1.253	-1.737	1.157	1.103	1.727	1.727	-1.737	0.591
786E	0.509	0.626	1.132	-1.921	0.993	0.634	1.896	1.896	-1.921	0.553
787I	-0.325	0.590	0.795	-1.649	0.820	0.616	2.177	2.177	-1.649	0.432
788T	0.269	1.405	0.907	-1.136	0.784	0.615	1.588	1.588	-1.136	0.633
789S	1.135	1.004	1.300	-0.694	1.112	1.102	0.991	1.300	-0.694	0.850
790I	1.021	0.053	1.300	-0.469	1.121	0.545	1.180	1.300	-0.469	0.679
791G	1.660	0.203	1.599	0.149	1.312	1.163	1.126	1.660	0.149	1.030
792D	1.097	0.115	1.281	0.683	1.148	1.144	1.674	1.674	0.115	1.020
793Q	0.104	0.203	1.066	1.146	0.948	1.129	1.765	1.765	0.104	0.909
794H	1.242	0.203	1.477	1.339	1.285	1.616	1.435	1.616	0.203	1.228
795V	1.242	0.017	1.477	1.101	1.285	1.616	1.435	1.616	0.017	1.168
796F	0.939	0.968	1.403	0.726	1.121	1.147	1.484	1.484	0.726	1.113
797D	0.326	0.954	0.954	0.434	0.738	1.106	1.910	1.910	0.326	1.034
798G	0.604	1.722	0.945	0.137	0.720	0.506	1.802	1.802	0.137	0.919
799T	1.198	1.185	1.057	-0.087	0.683	0.505	1.214	1.214	-0.087	0.822
800V	2.109	1.303	1.318	-0.110	0.884	0.520	1.003	2.109	-0.110	1.004
801S	1.609	1.225	1.206	0.123	0.738	0.651	1.280	1.609	0.123	0.976
802G	1.691	0.273	1.515	0.982	1.093	0.692	1.166	1.691	0.273	1.059
803T	0.781	-0.354	1.253	1.844	0.893	0.676	1.377	1.844	-0.354	0.924
804H	0.781	-0.236	1.253	2.546	0.893	0.676	1.377	2.546	-0.236	1.041
805N	0.503	0.301	1.103	2.254	0.738	0.656	0.207	2.254	0.207	0.823
806F	0.585	-0.633	1.412	1.653	1.093	0.697	0.094	1.653	-0.633	0.700
807V	0.617	0.397	1.206	0.787	0.893	0.677	0.053	1.206	0.053	0.661
808A	-0.022	0.289	0.907	0.313	0.701	0.059	0.108	0.907	-0.022	0.336
809N	-0.054	0.379	0.758	0.191	0.547	0.038	0.380	0.758	-0.054	0.320
810G	-0.054	0.379	0.739	-0.042	0.601	0.039	0.564	0.739	-0.054	0.318
811I	0.313	0.608	1.019	-0.055	0.784	0.658	0.243	1.019	-0.055	0.510
812S	0.623	0.728	1.318	0.473	1.093	0.698	1.140	1.318	0.473	0.868
813L	0.591	0.447	1.169	1.432	0.938	0.678	1.413	1.432	0.447	0.953
814H	-0.351	1.143	1.094	2.397	0.993	0.683	1.847	2.397	-0.351	1.115
815N	0.648	1.591	1.561	2.622	1.376	1.281	1.499	2.622	0.648	1.511
816S	0.617	0.982	1.739	1.651	1.595	1.303	1.503	1.739	0.617	1.341
817L	1.830	0.666	2.094	0.663	1.905	1.787	1.059	2.094	0.663	1.429
818E	1.830	0.774	1.935	-0.192	1.731	1.167	-0.218	1.935	-0.218	1.004
819Q	2.020	0.103	1.907	-0.073	1.741	1.615	-0.114	2.020	-0.114	1.028
820D	1.375	-0.713	1.636	0.192	1.576	1.597	0.314	1.636	-0.713	0.854
821A	1.723	-1.456	1.599	0.351	1.558	1.593	0.468	1.723	-1.456	0.834
822D	0.724	-1.660	1.132	-0.174	1.175	0.995	0.816	1.175	-1.660	0.430
823V	-0.237	-2.109	0.720	-0.977	0.811	0.958	1.088	1.088	-2.109	0.036
824V	-1.451	-1.200	0.365	-1.969	0.501	0.475	1.532	1.532	-1.969	-0.250
825I	-1.451	-0.745	0.524	-2.036	0.674	1.094	2.809	2.809	-2.036	0.124
826L	-1.818	0.119	0.683	-1.876	0.829	1.230	2.817	2.817	-1.876	0.284
827L	-1.451	0.323	1.047	-0.929	1.112	1.248	2.449	2.449	-1.451	0.543
828H	-0.585	0.353	1.440	-0.061	1.440	1.735	1.851	1.851	-0.585	0.882
829R	0.054	0.802	1.580	0.477	1.458	1.733	0.519	1.733	0.054	0.946
830P	0.054	0.802	1.599	0.608	1.403	1.732	0.335	1.732	0.054	0.933
831D	1.268	0.982	1.954	0.728	1.713	2.215	-0.109	2.215	-0.109	1.250
832A	1.401	0.982	2.225	0.411	2.014	2.220	-0.377	2.225	-0.377	1.268
833F	1.767	1.341	2.066	0.565	1.859	2.084	-0.385	2.084	-0.385	1.328
834D	2.267	2.329	2.094	0.730	1.905	2.554	-0.614	2.554	-0.614	1.609
835R	1.767	2.417	2.066	1.053	1.859	2.084	-0.385	2.417	-0.385	1.552
836D	1.900	2.231	2.496	1.286	2.333	2.709	0.624	2.709	0.624	1.940
837D	2.842	2.267	2.552	1.134	2.333	2.705	0.373	2.842	0.373	2.029
838P	2.570	1.728	2.272	0.320	1.968	2.216	0.383	2.570	0.320	1.637
839R	2.798	1.908	2.169	-0.548	1.859	2.191	0.357	2.798	-0.548	1.533
840G	2.298	0.920	1.898	-1.426	1.540	1.702	-0.644	2.298	-1.426	0.898
841G	2.298	-0.032	1.898	-1.595	1.540	1.702	-0.644	2.298	-1.595	0.738
842E	1.584	-0.863	1.589	-1.312	1.221	1.687	-0.613	1.687	-1.312	0.470
843A	0.813	-1.438	1.019	-0.805	0.729	1.064	-0.290	1.064	-1.438	0.156
844D	-0.129	-0.607	0.945	-0.608	0.784	1.070	0.145	1.070	-0.608	0.228
845F	-0.357	-1.055	0.954	-0.906	0.829	1.070	-0.866	1.070	-1.055	-0.047
846I	-0.490	-0.068	1.075	-1.579	1.103	1.065	-0.775	1.103	-1.579	0.047
847L	-0.490	0.866	1.234	-1.721	1.276	1.685	0.503	1.685	-1.721	0.479
848A	-0.857	1.698	1.393	-1.605	1.431	1.820	0.511	1.820	-1.605	0.627
849K	0.168	2.056	1.758	-0.510	1.786	1.857	0.147	2.056	-0.510	1.037
850H	1.034	1.716	1.889	0.408	1.759	1.855	-0.175	1.889	-0.175	1.212
851R	1.748	2.457	2.216	1.180	2.023	1.869	-0.390	2.457	-0.390	1.586
852N	1.944	2.134	2.412	1.257	2.178	1.889	0.661	2.412	0.661	1.782
853G	1.944	1.429	2.412	1.007	2.178	1.889	0.661	2.412	0.661	1.646
854P	2.140	1.293	2.449	0.283	2.160	1.289	0.435	2.449	0.283	1.436
855T	1.641	0.838	1.898	-0.212	1.677	0.666	1.024	1.898	-0.212	1.076
856K	1.527	0.347	1.795	-0.764	1.522	0.645	1.178	1.795	-0.764	0.893
857T	0.933	-0.394	1.683	-0.974	1.558	0.646	1.766	1.766	-0.974	0.746
858V	0.933	-0.394	1.440	-1.134	1.285	0.627	0.536	1.440	-1.134	0.470
859T	0.737	-0.502	1.403	-0.948	1.303	1.227	0.763	1.403	-0.948	0.569
860V	0.756	-0.903	1.281	-0.538	1.039	0.675	0.861	1.281	-0.903	0.453
861A	-0.155	-1.011	1.001	-0.100	0.893	0.661	1.256	1.256	-1.011	0.363
862H	0.212	-0.156	1.281	0.567	1.075	1.279	0.934	1.281	-0.156	0.742
863Q	-0.698	0.568	1.001	0.688	0.929	1.264	1.328	1.328	-0.698	0.726
864L	-0.054	-0.098	1.272	0.843	1.093	1.283	0.899	1.283	-0.098	0.748
865H	0.079	0.107	1.702	0.661	1.567	1.908	1.909	1.909	0.079	1.133

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866L    -0.635    0.626    1.477    0.379    1.349    1.292    1.893    1.893   -0.635    0.911
867S    -0.882    0.716    1.150   -0.118    0.975    1.249    0.719    1.249   -0.882    0.544
868R     0.142   -0.140    1.533   -0.070    1.276    1.285    0.171    1.533   -0.140    0.600
869F    -0.256   -0.140    1.365   -0.299    1.148    0.682   -0.151    1.365   -0.299    0.336
870A     0.459    0.289    1.449    0.057    1.139    0.677   -1.597    1.449   -1.597    0.353
871N     0.313    0.544    1.730   -0.246    1.458    1.281   -1.757    1.730   -1.757    0.475
872M     0.048    0.189    0.842   -0.635    1.303    0.717   -2.766    1.303   -2.766   -0.043
873A     0.629    0.558    0.449   -1.311    1.668    0.772   -4.028    1.668   -4.028   -0.180
874R     0.496    0.812   -0.009   -1.390    1.987    0.832   -4.028    1.987   -4.028   -0.186
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TOP

Overlap Display

Selected Programs: hydro flexi access turns surface polar antipro

Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9

The predicted B-cell epitopes are shown in blue colour and underlined.

Sequence	[1]MAVVDDLAPGMDSSPPSEDYGRQPPQDLAAEQSVLGGMLLSKDAIADVLERLRPGDFYRPAHQNVYDAILDLYGRGEPADAVTVAAELDRRGLLRRIGGAPYLHTLISTVPTAANAGYYASIVAEKALLRRLVF
Hydrophilicity	[1]MAVVDDLAPGM_DSSPPSEDYGRQPPQD_LAAEQSVLGGMLLSKDAIADVLERLRPGDFYRPAHQNVYDAILDLY_GRGEPADA_VTVAAELDRRGLLRRIGGAPYLHTLISTVPTAANAGYYASIVAEKALLRRLVF
Flexibility	[1]MAVVDDLA_PGMDSSPPS_EDYGRQPPQDLAAEQSVLGGMLLSKDAIADVLERLRPGDFYRPAHQNVYDAILDLYGRGEPADAVTVAAELDRRGLLRRIGGAPYLHTLISTVPTAANAGYYASIVAEKALLRRLVF
Accessibility	[1]MAVVDDLAPGM_DSSPPSEDYGRQPPQDLA_AEQSVLGGMLLSKDAIADVL_ERLRPGDFYRPAHQNV_YDAILDLYG_RGEPADA_VTV_AAELDRRGLLRR_IGGAPYLHTLISTVPTAANAGYYASIVA_EKALLRRL_VF
Turns	[1]MAVVDDLAPGMDSSPPSEDYGRQPPQDLAAEQSVLGGMLLSKDAIADVLERLRPGDFYRPAHQNVYDAILDLYGRGEPADAVTVAAELDRRGLLRRIGGAPYLHTLISTVPTAANAGYYASIVAEKALLRRLVF
Exposed Surface	[1]MAVVDDLAPGMDSSPPSEDYGRQPPQDLAAEQSVLGGMLLSKDAIADVLERLRPGDFYRPAHQNVYDAILDLYGRGEPADAVTVAAELDRRGLLRRIGGAPYLHTLISTVPTAANAGYYASIVAEKALLRRLVF
Polarity	[1]MAVVDDLAPGMDSSPPSEDYGRQPPQDLAAEQSVLGGMLLSKDAIA_DVLERLRPGD_FYRPAHQNVYDAILDLYGRGEPADAVTV_AAELDRRGLLRR_IGGAPYLHTLISTVPTAANAGYYASIVA_EKALLRRLVF
Antigenic Propensity	[1]MAVVDDLAPGMDSSPPSEDYGRQPPQDLAAEQS_VLGGMLL_SKDAIADVLERLRPGDFYRPAHQNVYDAILDLYGRGEPADAVTVAAELDRRGLLRRIGGA_PYLHTLISTVPT_AANAGYYASIVAEKA_LLRRLVF

TOP

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