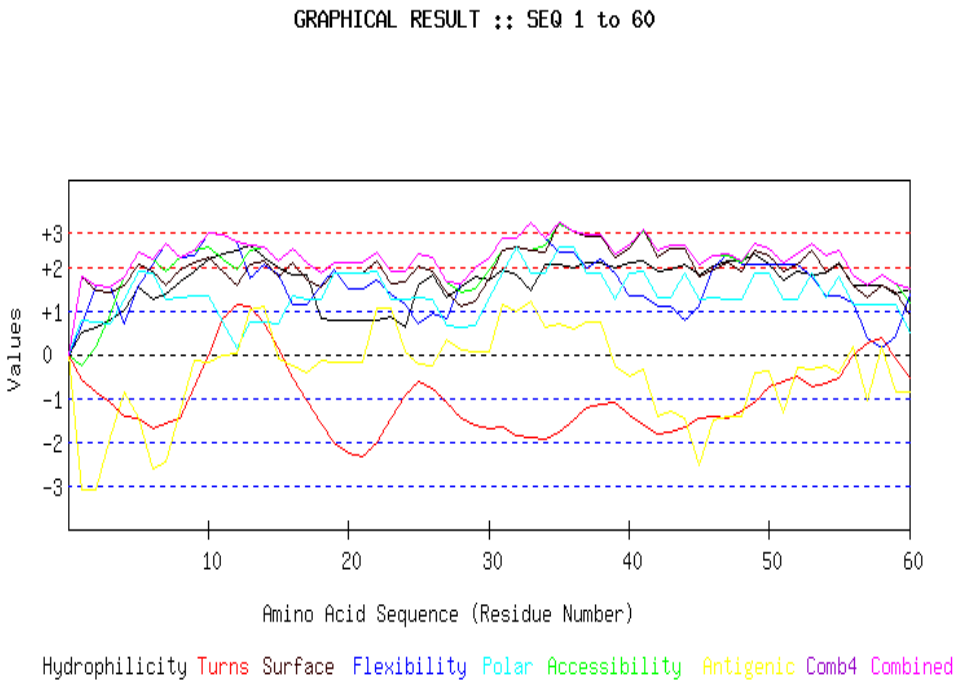
BcePred Prediction Server

The server displays 1.GRAPHICAL RESULT 2.TABULAR RESULT 3.Overlap Display

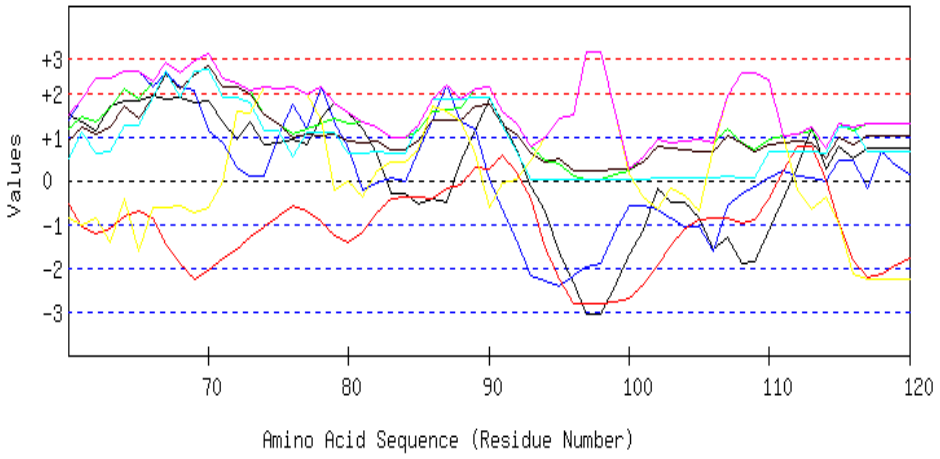
seqname=
Seq=VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAGRSTRAR
RTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGQLKVTDVQPAARGSIVDRNN
DRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNNKPDAAAVLKKLQSDETFVYLARA
VDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDGHGLLGLEDSLDAVLAGTDGSVTYDRGSDGV
VIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQAKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIG
RQGDKQLGNPAVSSPFEPGSVNKIVAASAVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGK
SSNVGTLMLSQRVGPERYYDMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGM
YQAIANDGVRVPPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGY
QMAGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAGWLMQR
ENVPLSPDPGPPLVLQAT

Length=679

GRAPHICAL RESULT

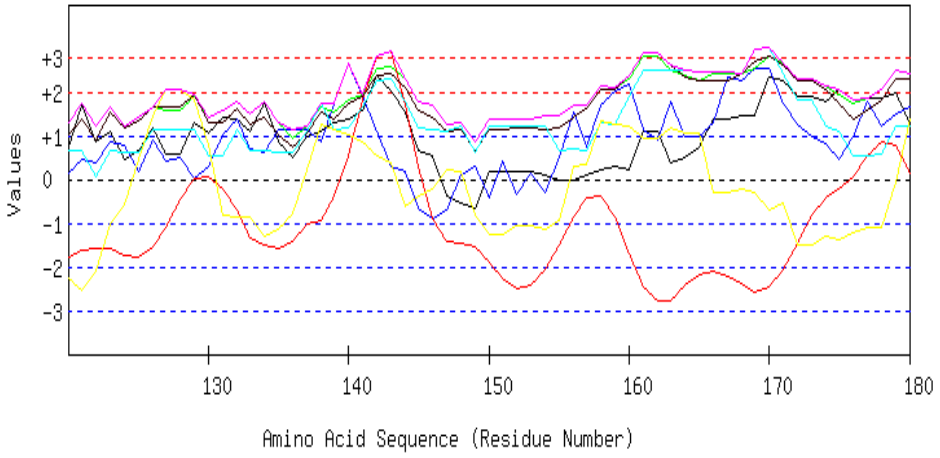


GRAPHICAL RESULT :: SEQ 61 to 120



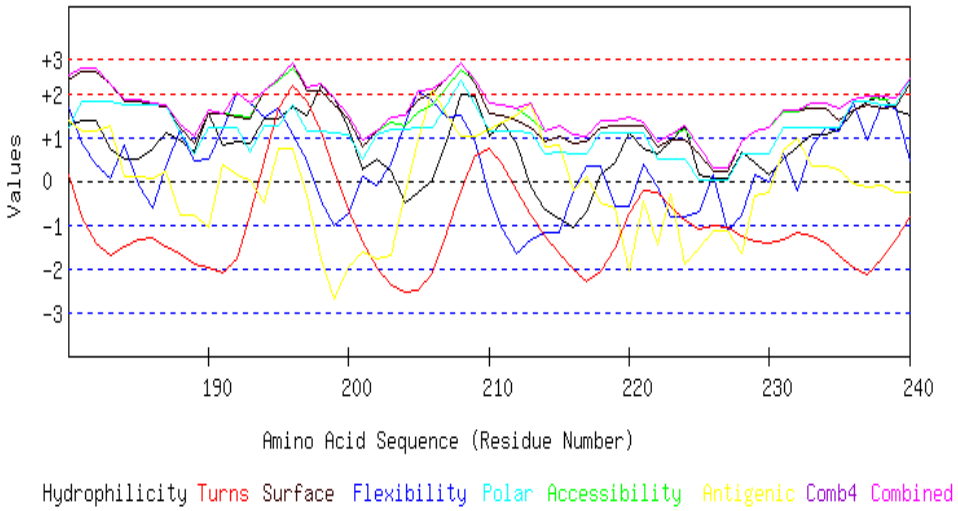
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 121 to 180

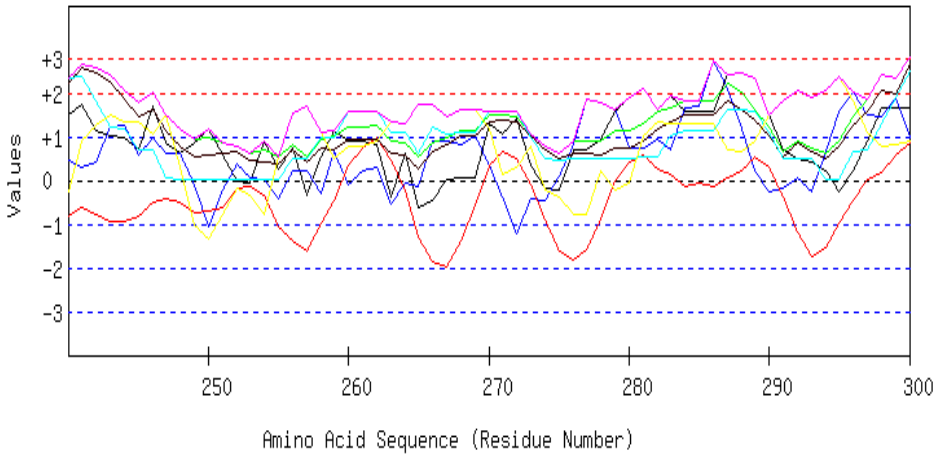


Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 181 to 240

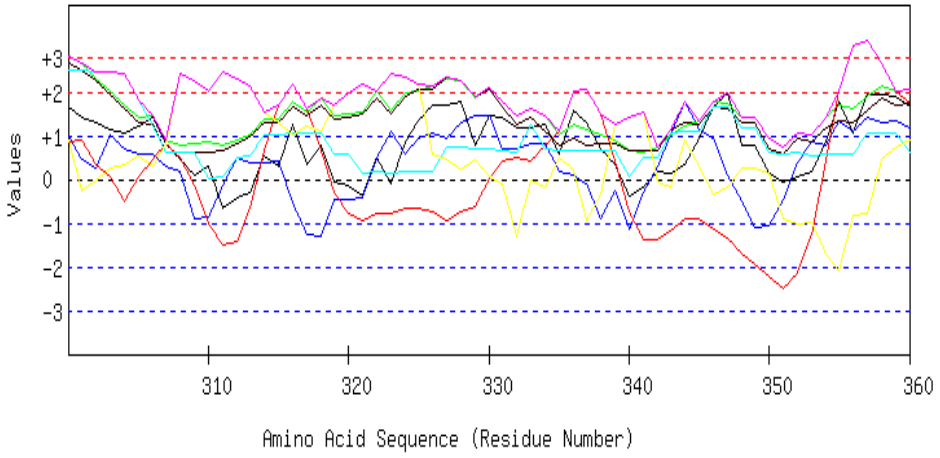


GRAPHICAL RESULT :: SEQ 241 to 300



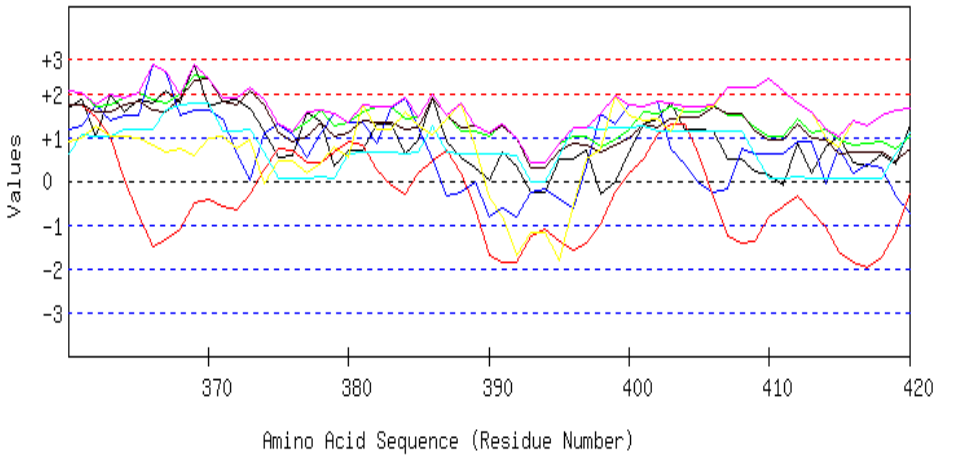
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 301 to 360

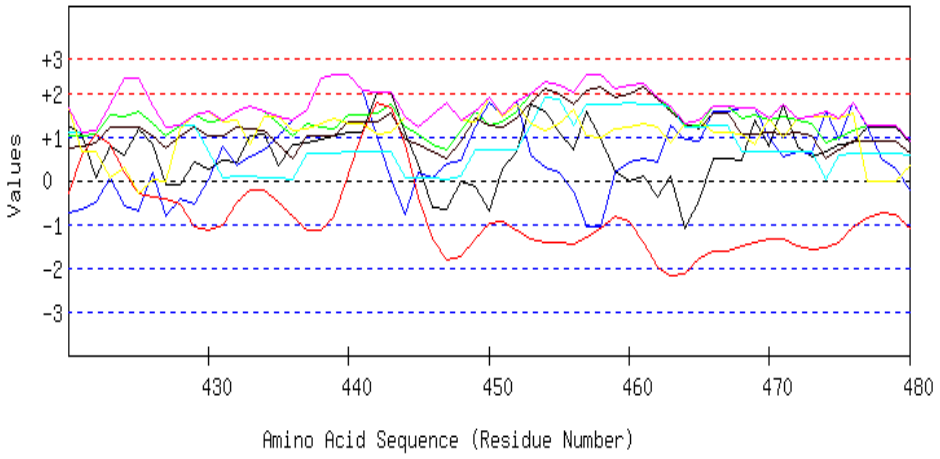


Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

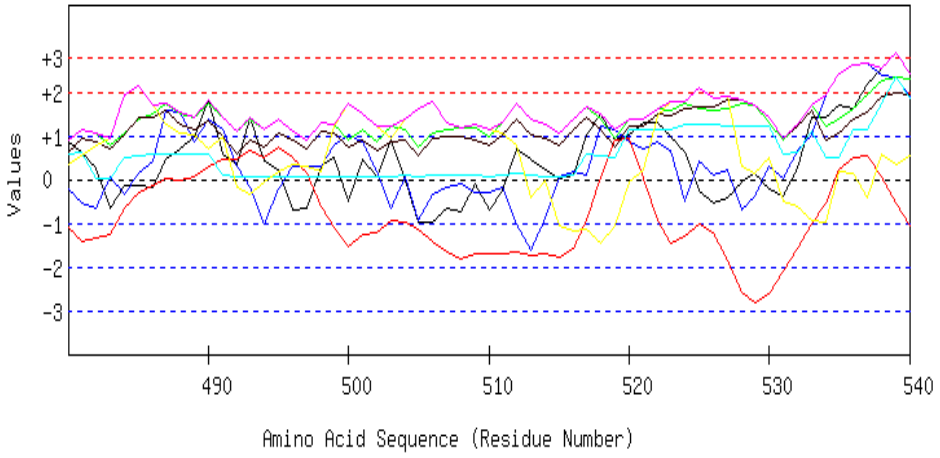
GRAPHICAL RESULT :: SEQ 361 to 420



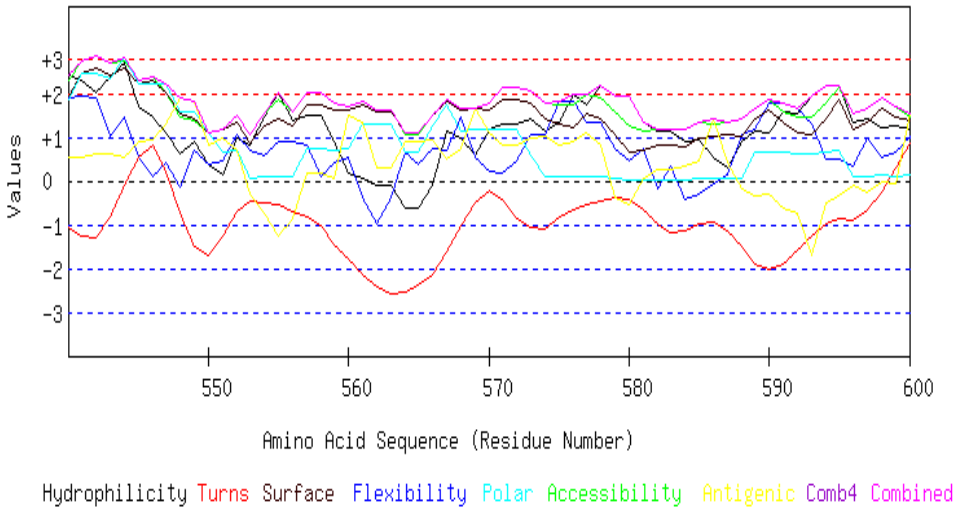
GRAPHICAL RESULT :: SEQ 421 to 480



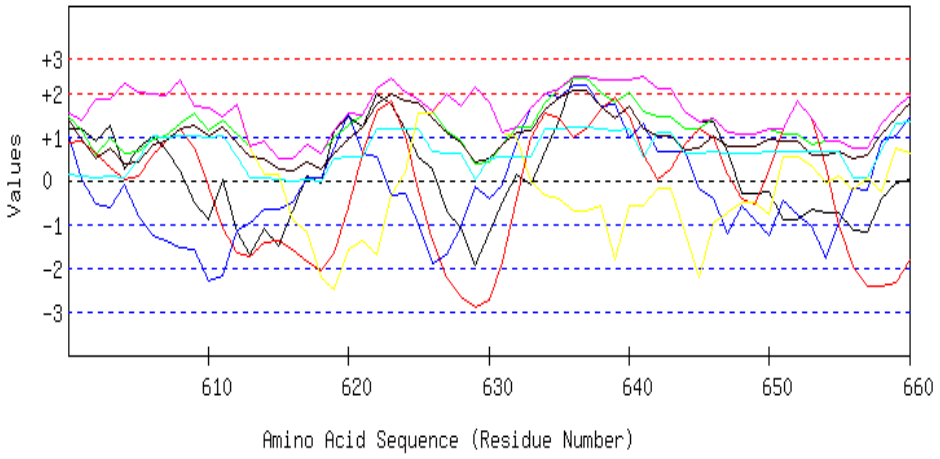
GRAPHICAL RESULT :: SEQ 481 to 540



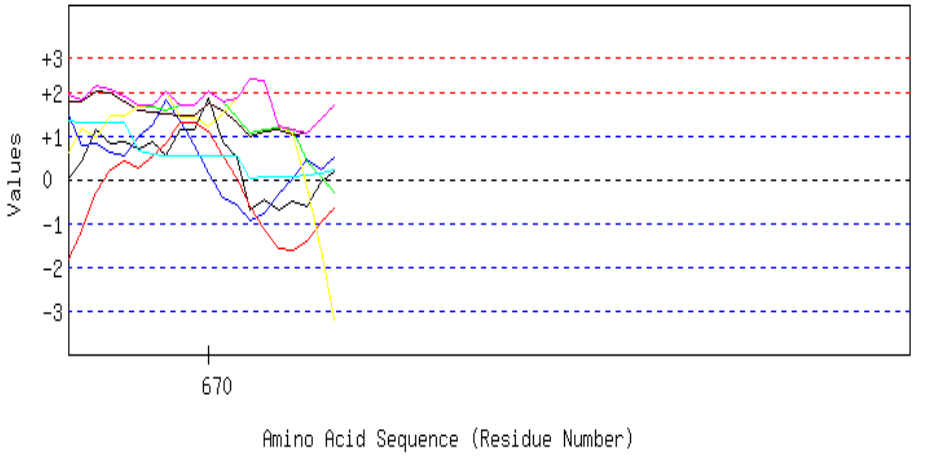
GRAPHICAL RESULT :: SEQ 541 to 600



GRAPHICAL RESULT :: SEQ 601 to 660



GRAPHICAL RESULT :: SEQ 661 to 720



TOP

TABULAR RESULT

Selected Programs: hydro flexi access turns surface polar antipro

Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9

**VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVA
PAGRSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQ
AAGQLKVTDVQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQ
QRLRDIAQEVAGKLNNKPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQ
DLRQYPGGSLAANVVGGIDWDGHGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRN
RHKAVHGSTVVLTLDNDIQFYVQQQVQQAKNLSGAHNVSAVVLDAKTGEVLAMANDNTFD
PSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAASAVIEHGLSSPDEVLQVPGSIQMGGVT
VHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYYDMLRKFGLGQRTGVGLPGESA
GLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRVPPRIIKATVAPDGSRT
EEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQMAGKTGTAQQIN
PGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAGWLMQ
RENVPLSPDPGPPLVLQAT**

Length=679

A.A.	Parameter							Combined		
	Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX	MIN	AVG
1 V	0.496	0.658	-0.270	-0.588	1.777	0.796	-3.111	1.777	-3.111	-0.035
2 S	0.629	1.567	0.188	-0.873	1.458	0.736	-3.111	1.567	-3.111	0.085

3	R	0.762	1.525	0.889	-1.092	1.412	0.695	-1.881	1.525	-1.881	0.330
4	A	1.028	0.712	1.776	-1.415	1.567	1.260	-0.872	1.776	-1.415	0.579
5	A	1.527	1.567	2.328	-1.470	2.050	1.883	-1.461	2.328	-1.470	0.918
6	P	1.249	2.058	2.178	-1.698	1.895	1.863	-2.631	2.178	-2.631	0.702
7	R	1.394	2.555	1.898	-1.591	1.576	1.258	-2.470	2.555	-2.470	0.660
8	R	1.641	2.233	2.225	-1.446	1.950	1.301	-1.297	2.233	-1.446	0.944
9	A	1.919	2.275	2.374	-0.739	2.105	1.321	-0.127	2.374	-0.739	1.304
10	S	2.166	2.766	2.459	-0.025	2.205	1.344	-0.184	2.766	-0.184	1.533
11	Q	2.311	2.723	2.178	0.804	1.886	0.740	-0.023	2.723	-0.023	1.517
12	S	2.374	2.591	1.945	1.146	1.567	0.135	0.019	2.591	0.019	1.397
13	Q	2.507	1.736	2.374	1.096	2.041	0.759	1.028	2.507	0.759	1.649
14	S	2.229	2.058	2.468	0.701	2.160	0.758	1.088	2.468	0.701	1.637
15	T	1.982	1.830	2.141	0.154	1.786	0.716	-0.086	2.141	-0.086	1.218
16	R	1.837	1.135	2.421	-0.534	2.105	1.321	-0.246	2.421	-0.534	1.148
17	P	1.818	1.135	2.085	-1.066	1.686	1.278	-0.409	2.085	-1.066	0.932
18	A	0.825	1.589	1.851	-1.586	1.540	1.264	-0.134	1.851	-1.586	0.764
19	R	0.762	1.948	2.085	-2.004	1.859	1.868	-0.176	2.085	-2.004	0.906
20	G	0.762	1.493	2.085	-2.267	1.859	1.868	-0.176	2.085	-2.267	0.803
21	L	0.762	1.493	2.085	-2.354	1.859	1.868	-0.176	2.085	-2.354	0.791
22	R	0.762	1.698	2.328	-2.038	2.132	1.887	1.054	2.328	-2.038	1.118
23	R	0.857	1.375	1.889	-1.459	1.613	1.263	1.056	1.889	-1.459	0.942
24	P	0.629	1.137	1.898	-0.933	1.658	1.263	0.045	1.898	-0.933	0.814
25	P	1.590	0.682	2.309	-0.623	2.023	1.300	-0.227	2.309	-0.623	1.008
26	G	1.818	0.950	2.206	-0.782	1.914	1.274	-0.252	2.206	-0.782	1.018
27	A	1.318	0.814	1.655	-1.098	1.431	0.651	0.338	1.655	-1.098	0.730
28	Q	1.546	1.627	1.403	-1.470	1.112	0.632	0.118	1.627	-1.470	0.710
29	E	1.793	1.968	1.487	-1.618	1.212	0.656	0.061	1.968	-1.618	0.794
30	V	1.698	2.207	1.926	-1.681	1.731	1.280	0.060	2.207	-1.681	1.032
31	G	1.925	2.661	2.374	-1.676	2.369	1.875	1.135	2.661	-1.676	1.524
32	Q	1.812	2.661	2.477	-1.867	2.470	2.457	0.971	2.661	-1.867	1.569
33	R	1.451	3.002	2.393	-1.917	2.379	1.877	1.217	3.002	-1.917	1.486
34	K	2.045	2.679	2.505	-1.948	2.342	1.875	0.629	2.679	-1.948	1.447
35	R	2.045	2.339	2.963	-1.761	3.026	2.470	0.694	3.026	-1.761	1.682
36	P	1.995	2.357	2.832	-1.493	2.807	2.447	0.571	2.832	-1.493	1.645
37	G	2.109	1.998	2.730	-1.210	2.707	1.865	0.735	2.730	-1.210	1.562
38	K	2.109	2.184	2.730	-1.134	2.707	1.865	0.735	2.730	-1.134	1.599
39	T	1.976	1.844	2.300	-1.113	2.233	1.240	-0.274	2.300	-1.113	1.172
40	Q	2.109	1.353	2.487	-1.385	2.433	1.846	-0.495	2.487	-1.385	1.193
41	K	2.128	1.353	2.823	-1.615	2.852	1.889	-0.332	2.852	-1.615	1.300
42	A	1.900	1.097	2.374	-1.838	2.214	1.294	-1.407	2.374	-1.838	0.805
43	R	1.951	1.097	2.505	-1.787	2.433	1.316	-1.284	2.505	-1.787	0.890
44	Q	2.064	0.774	2.505	-1.647	2.424	1.874	-1.474	2.505	-1.647	0.932
45	A	1.837	1.115	2.057	-1.450	1.786	1.279	-2.549	2.057	-2.549	0.582
46	Q	2.033	1.970	2.253	-1.402	1.941	1.299	-1.498	2.253	-1.498	0.942
47	E	2.128	2.293	2.272	-1.444	2.105	1.269	-1.432	2.293	-1.444	1.027
48	A	2.159	2.076	2.094	-1.289	1.886	1.246	-1.436	2.159	-1.436	0.963
49	T	2.292	2.076	2.524	-1.098	2.360	1.871	-0.427	2.524	-1.098	1.371
50	K	2.045	2.076	2.440	-0.740	2.260	1.848	-0.370	2.440	-0.740	1.366
51	S	1.685	2.058	2.113	-0.614	1.895	1.248	-1.354	2.113	-1.354	1.005
52	R	1.881	2.058	2.309	-0.489	2.050	1.268	-0.303	2.309	-0.489	1.254
53	P	1.818	1.784	2.543	-0.759	2.369	1.873	-0.344	2.543	-0.759	1.326
54	A	1.868	1.329	2.244	-0.657	1.886	1.298	-0.250	2.244	-0.657	1.103
55	T	2.090	1.329	2.365	-0.523	2.050	1.767	-0.418	2.365	-0.523	1.237
56	R	1.590	1.197	1.814	-0.014	1.567	1.144	0.171	1.814	-0.014	1.067
57	S	1.590	0.383	1.571	0.262	1.294	1.125	-1.059	1.590	-1.059	0.738
58	D	1.590	0.155	1.814	0.368	1.567	1.144	0.171	1.814	0.155	0.973
59	V	1.394	0.429	1.617	-0.108	1.412	1.124	-0.880	1.617	-0.880	0.713
60	A	1.489	1.381	1.178	-0.550	0.893	0.499	-0.879	1.489	-0.879	0.573
61	P	1.344	1.872	1.459	-1.073	1.212	1.104	-1.039	1.872	-1.073	0.697

62 A	1.122	2.327	1.337	-1.217	1.048	0.635	-0.870	2.327	-1.217	0.626
63 G	1.685	2.327	1.655	-1.099	1.212	0.654	-1.418	2.327	-1.418	0.716
64 R	1.818	2.513	2.085	-0.817	1.686	1.278	-0.409	2.513	-0.817	1.165
65 S	1.818	2.513	1.842	-0.700	1.412	1.259	-1.639	2.513	-1.639	0.929
66 T	1.951	2.148	2.272	-0.860	1.886	1.884	-0.630	2.272	-0.860	1.236
67 R	1.856	2.471	2.711	-1.465	2.406	2.509	-0.631	2.711	-1.465	1.408
68 A	1.919	2.148	2.477	-1.915	2.087	1.904	-0.590	2.477	-1.915	1.147
69 R	1.774	2.052	2.758	-2.250	2.406	2.508	-0.750	2.758	-2.250	1.214
70 R	1.824	1.143	2.888	-2.057	2.625	2.531	-0.628	2.888	-2.057	1.189
71 T	1.325	0.868	2.337	-1.776	2.142	1.908	-0.038	2.337	-1.776	0.966
72 R	0.958	0.281	2.216	-1.588	2.132	1.909	1.561	2.216	-1.588	1.067
73 Q	1.325	0.095	2.057	-1.318	1.977	1.774	1.553	2.057	-1.318	1.066
74 V	0.825	0.095	1.505	-1.079	1.494	1.150	2.142	2.142	-1.079	0.876
75 V	0.857	1.004	1.300	-0.828	1.294	1.131	2.102	2.102	-0.828	0.980
76 D	0.920	1.728	1.066	-0.565	0.975	0.526	2.143	2.143	-0.565	0.970
77 V	0.806	1.189	1.169	-0.687	1.075	1.108	1.979	1.979	-0.687	0.948
78 G	1.401	2.140	1.281	-0.953	1.039	1.107	1.391	2.140	-0.953	1.058
79 T	1.767	1.339	1.403	-1.279	1.048	1.105	-0.208	1.767	-1.279	0.739
80 R	1.546	0.752	1.281	-1.419	0.884	0.636	-0.039	1.546	-1.419	0.520
81 G	1.198	-0.236	1.337	-1.180	0.847	0.639	-0.377	1.337	-1.180	0.318
82 A	0.604	-0.050	1.225	-0.752	0.884	0.640	0.212	1.225	-0.752	0.395
83 S	-0.307	0.041	0.963	-0.412	0.683	0.625	0.422	0.963	-0.412	0.288
84 F	-0.307	-0.001	0.963	-0.395	0.683	0.625	0.422	0.963	-0.395	0.284
85 V	-0.534	0.664	1.132	-0.367	0.902	1.244	0.689	1.244	-0.534	0.533
86 F	-0.401	1.387	1.561	-0.418	1.376	1.869	1.698	1.869	-0.418	1.010
87 R	-0.484	2.170	1.608	-0.175	1.376	1.869	1.579	2.170	-0.484	1.135
88 H	0.459	1.357	1.664	-0.089	1.376	1.865	1.328	1.865	-0.089	1.137
89 R	1.135	1.171	2.085	0.283	1.695	1.904	0.627	2.085	0.283	1.271
90 T	1.849	0.033	2.150	0.267	1.741	1.900	-0.635	2.150	-0.635	1.044
91 G	1.350	-0.663	1.599	0.569	1.257	1.276	-0.045	1.599	-0.663	0.763
92 N	0.711	-1.386	1.300	0.162	1.066	0.658	0.009	1.300	-1.386	0.360
93 A	-0.136	-2.199	0.786	-0.427	0.601	0.039	0.445	0.786	-2.199	-0.127
94 V	-0.698	-2.314	0.468	-1.533	0.437	0.021	0.993	0.993	-2.314	-0.375
95 I	-1.641	-2.422	0.393	-2.254	0.492	0.026	1.428	1.428	-2.422	-0.568
96 L	-2.349	-2.193	0.085	-2.802	0.228	0.003	1.486	1.486	-2.802	-0.792
97 V	-3.063	-1.989	0.001	-2.808	0.237	0.008	2.931	2.931	-3.063	-0.669
98 L	-3.063	-1.893	0.001	-2.838	0.237	0.008	2.931	2.931	-3.063	-0.660
99 M	-2.425	-1.198	0.141	-2.791	0.255	0.006	1.599	1.599	-2.791	-0.630
100L	-1.710	-0.593	0.225	-2.690	0.246	0.001	0.154	0.246	-2.690	-0.624
101V	-1.147	-0.593	0.543	-2.374	0.410	0.019	-0.394	0.543	-2.374	-0.505
102A	-0.186	-0.671	0.954	-1.930	0.774	0.056	-0.666	0.954	-1.930	-0.238
103A	-0.503	-0.845	0.879	-1.487	0.738	0.045	-0.176	0.879	-1.487	-0.193
104T	-0.503	-1.049	0.898	-1.106	0.683	0.043	-0.360	0.898	-1.106	-0.199
105Q	-0.850	-1.049	0.954	-0.889	0.647	0.046	-0.697	0.954	-1.049	-0.263
106L	-1.565	-1.636	0.870	-0.870	0.656	0.051	0.748	0.870	-1.636	-0.249
107F	-1.318	-0.576	1.197	-0.845	1.030	0.094	1.921	1.921	-1.318	0.215
108F	-1.881	-0.312	0.879	-0.982	0.866	0.075	2.469	2.469	-1.881	0.159
109L	-1.849	-0.138	0.702	-0.905	0.647	0.053	2.466	2.466	-1.849	0.139
110Q	-1.135	0.067	0.945	-0.407	0.811	0.668	2.298	2.298	-1.135	0.464
111V	-0.420	0.203	1.010	0.222	0.856	0.663	1.037	1.037	-0.420	0.510
112S	0.294	0.095	1.075	0.780	0.902	0.659	-0.224	1.075	-0.224	0.512
113H	1.236	0.053	1.150	0.798	0.847	0.654	-0.659	1.236	-0.659	0.583
114A	0.275	-0.038	0.739	0.026	0.483	0.617	-0.387	0.739	-0.387	0.245
115A	0.775	0.453	1.290	-0.980	0.966	1.240	-0.977	1.290	-0.980	0.395
116G	0.496	0.453	1.141	-1.821	0.811	1.220	-2.147	1.220	-2.147	0.022
117L	0.743	-0.174	1.309	-2.228	1.011	0.642	-2.251	1.309	-2.251	-0.135
118R	0.743	0.658	1.309	-2.153	1.011	0.642	-2.251	1.309	-2.251	-0.006
119A	0.743	0.335	1.309	-1.942	1.011	0.642	-2.251	1.309	-2.251	-0.022
120Q	0.743	0.131	1.309	-1.773	1.011	0.642	-2.251	1.309	-2.251	-0.027

121A	1.704	0.471	1.720	-1.613	1.376	0.679	-2.523	1.720	-2.523	0.259
122A	0.857	0.375	1.206	-1.591	0.911	0.060	-2.087	1.206	-2.087	-0.038
123G	1.084	0.866	1.655	-1.591	1.549	0.655	-1.012	1.655	-1.591	0.458
124Q	0.471	0.778	1.206	-1.739	1.166	0.614	-0.586	1.206	-1.739	0.273
125L	0.667	0.191	1.403	-1.795	1.321	0.634	0.465	1.403	-1.795	0.412
126K	1.167	0.886	1.674	-1.559	1.640	1.123	1.466	1.674	-1.559	0.914
127V	0.572	0.413	1.561	-1.094	1.677	1.124	2.054	2.054	-1.094	0.901
128T	0.572	0.509	1.561	-0.448	1.677	1.124	2.054	2.054	-0.448	1.007
129D	1.287	0.019	1.889	0.034	1.941	1.138	1.839	1.941	0.019	1.164
130V	1.059	0.293	1.440	0.069	1.303	0.543	0.764	1.440	0.069	0.782
131Q	1.426	1.016	1.561	-0.217	1.312	0.542	-0.835	1.561	-0.835	0.686
132P	1.363	1.381	1.795	-0.713	1.631	1.146	-0.876	1.795	-0.876	0.818
133A	1.091	0.698	1.515	-1.321	1.267	0.657	-0.867	1.515	-1.321	0.434
134A	1.736	0.602	1.786	-1.505	1.431	0.676	-1.296	1.786	-1.505	0.490
135R	0.850	1.141	1.318	-1.581	1.039	0.635	-1.138	1.318	-1.581	0.324
136G	0.484	1.141	0.954	-1.402	0.756	0.618	-0.769	1.141	-1.402	0.254
137S	0.983	1.123	1.225	-1.038	1.075	1.107	0.232	1.225	-1.038	0.672
138I	1.116	0.876	1.655	-0.934	1.549	1.732	1.242	1.732	-0.934	1.034
139V	1.293	1.740	1.524	-0.395	1.385	1.147	1.130	1.740	-0.395	1.118
140D	1.375	2.649	1.832	0.553	1.741	1.188	1.016	2.649	0.553	1.479
141R	1.597	1.906	1.954	1.817	1.905	1.657	0.847	1.954	0.847	1.669
142N	2.368	1.093	2.524	2.810	2.397	2.280	0.525	2.810	0.525	1.999
143N	2.020	0.309	2.561	2.926	2.415	2.284	0.371	2.926	0.309	1.841
144D	1.521	0.191	2.290	1.719	2.096	1.795	-0.630	2.290	-0.630	1.283
145R	0.673	-0.673	1.795	0.315	1.576	1.174	-0.378	1.795	-0.673	0.640
146L	0.560	-0.911	1.692	-0.919	1.422	1.154	-0.224	1.692	-0.919	0.396
147A	-0.389	-0.707	1.253	-1.407	1.093	1.115	0.210	1.253	-1.407	0.167
148F	-0.528	0.107	1.309	-1.455	1.139	1.225	0.193	1.309	-1.455	0.284
149T	-0.661	0.281	0.879	-1.537	0.665	0.601	-0.816	0.879	-1.537	-0.084
150I	0.187	-0.414	1.393	-1.906	1.130	1.220	-1.252	1.393	-1.906	0.051
151E	0.187	0.401	1.393	-2.271	1.130	1.220	-1.252	1.393	-2.271	0.115
152A	0.187	-0.348	1.375	-2.493	1.185	1.221	-1.068	1.375	-2.493	0.008
153R	0.187	0.143	1.375	-2.418	1.185	1.221	-1.068	1.375	-2.418	0.089
154A	0.111	-0.312	1.449	-2.045	1.157	1.224	-1.139	1.449	-2.045	0.064
155L	-0.003	0.519	1.449	-1.505	1.166	0.666	-0.949	1.449	-1.505	0.192
156T	-0.003	1.537	1.692	-0.849	1.440	0.685	0.281	1.692	-0.849	0.683
157F	0.092	0.722	1.711	-0.408	1.604	0.655	0.347	1.711	-0.408	0.675
158Q	0.225	1.710	2.141	-0.391	2.078	1.280	1.356	2.141	-0.391	1.200
159P	0.300	2.032	2.085	-0.873	2.050	1.276	1.243	2.085	-0.873	1.159
160K	0.237	2.164	2.318	-1.680	2.369	1.881	1.201	2.369	-1.680	1.213
161R	1.084	1.129	2.814	-2.470	2.889	2.502	0.949	2.889	-2.470	1.271
162I	1.084	0.890	2.814	-2.783	2.889	2.502	0.949	2.889	-2.783	1.192
163R	0.370	1.790	2.487	-2.785	2.625	2.488	1.164	2.625	-2.785	1.163
164R	0.503	0.976	2.365	-2.421	2.351	2.493	1.073	2.493	-2.421	1.049
165Q	0.730	0.976	2.262	-2.180	2.242	2.468	1.047	2.468	-2.180	1.078
166L	1.369	1.317	2.403	-2.093	2.260	2.466	-0.284	2.466	-2.093	1.062
167E	1.369	2.353	2.403	-2.239	2.260	2.466	-0.284	2.466	-2.239	1.190
168E	1.464	2.269	2.421	-2.374	2.424	2.436	-0.218	2.436	-2.374	1.203
169A	1.445	2.549	2.543	-2.563	2.688	2.988	-0.317	2.988	-2.563	1.333
170R	2.355	2.549	2.823	-2.479	2.834	3.003	-0.711	3.003	-2.479	1.482
171K	2.273	1.736	2.646	-2.066	2.625	2.423	-0.525	2.646	-2.066	1.302
172K	1.913	1.263	2.318	-1.451	2.260	1.824	-1.509	2.318	-1.509	0.945
173T	1.913	0.970	2.318	-0.824	2.260	1.824	-1.509	2.318	-1.509	0.993
174S	1.780	0.838	2.132	-0.432	2.060	1.218	-1.288	2.132	-1.288	0.901
175A	2.052	0.473	1.954	-0.215	1.741	1.112	-1.362	2.052	-1.362	0.822
176A	1.824	0.964	1.748	0.063	1.376	0.537	-1.207	1.824	-1.207	0.758
177P	1.875	1.778	1.879	0.532	1.595	0.559	-1.084	1.879	-1.084	1.019
178D	1.843	1.215	2.057	0.876	1.813	0.582	-1.081	2.057	-1.081	1.043
179P	1.976	1.489	2.487	0.787	2.287	1.206	-0.072	2.487	-0.072	1.452

180Q	1.261	1.670	2.403	0.150	2.296	1.212	1.373	2.403	0.150	1.481
181Q	1.394	0.854	2.589	-0.823	2.497	1.817	1.153	2.589	-0.823	1.355
182R	1.394	0.363	2.589	-1.405	2.497	1.817	1.153	2.589	-1.405	1.201
183L	0.756	0.041	2.206	-1.685	2.205	1.800	1.254	2.206	-1.685	0.940
184R	0.509	0.820	1.879	-1.497	1.832	1.758	0.081	1.879	-1.497	0.769
185D	0.509	-0.090	1.879	-1.339	1.832	1.758	0.081	1.879	-1.339	0.661
186I	0.737	-0.629	1.776	-1.311	1.722	1.733	0.056	1.776	-1.311	0.583
187A	1.084	0.323	1.739	-1.506	1.704	1.729	0.209	1.739	-1.506	0.755
188Q	0.952	1.155	1.309	-1.643	1.230	1.104	-0.800	1.309	-1.643	0.472
189E	0.680	0.459	1.029	-1.890	0.866	0.615	-0.791	1.029	-1.890	0.138
190V	1.546	0.493	1.617	-1.968	1.522	1.208	-1.047	1.617	-1.968	0.482
191A	0.832	1.199	1.533	-2.093	1.531	1.213	0.398	1.533	-2.093	0.659
192G	0.895	2.030	1.505	-1.775	1.467	1.212	0.121	2.030	-1.775	0.779
193K	0.844	1.762	1.477	-0.798	1.412	0.653	0.035	1.762	-0.798	0.769
194L	1.438	1.469	2.047	0.447	2.060	1.246	-0.489	2.060	-0.489	1.174
195N	1.438	1.674	2.290	1.654	2.333	1.265	0.741	2.333	0.741	1.628
196N	1.710	1.064	2.571	2.169	2.698	1.754	0.732	2.698	0.732	1.814
197K	1.483	0.455	2.122	1.827	2.060	1.159	-0.343	2.122	-0.343	1.252
198P	2.197	-0.472	2.206	1.146	2.050	1.154	-1.788	2.206	-1.788	0.928
199D	1.887	-1.035	1.907	0.236	1.741	1.113	-2.686	1.907	-2.686	0.452
200A	1.211	-0.743	1.487	-0.668	1.422	1.074	-1.984	1.487	-1.984	0.257
201A	0.269	0.089	0.954	-1.367	0.793	0.485	-1.614	0.954	-1.614	-0.056
202A	0.496	-0.116	1.160	-1.979	1.157	1.060	-1.769	1.160	-1.979	0.001
203V	0.225	0.375	1.337	-2.398	1.476	1.166	-1.695	1.476	-2.398	0.069
204L	-0.490	1.327	1.253	-2.528	1.485	1.171	-0.250	1.485	-2.528	0.281
205K	-0.243	2.070	1.580	-2.495	1.859	1.214	0.924	2.070	-2.495	0.701
206K	0.035	1.814	1.730	-2.090	2.014	1.234	2.094	2.094	-2.090	0.976
207L	0.901	1.473	2.122	-1.197	2.342	1.721	1.496	2.342	-1.197	1.266
208Q	1.976	1.503	2.533	-0.223	2.698	2.315	1.035	2.698	-0.223	1.691
209S	1.944	0.916	2.281	0.582	2.214	1.741	1.010	2.281	0.582	1.527
210D	1.002	-0.346	1.767	0.745	1.531	1.150	1.197	1.767	-0.346	1.007
211E	1.350	-1.089	1.730	0.374	1.513	1.147	1.350	1.730	-1.089	0.911
212T	0.850	-1.664	1.655	-0.201	1.376	1.123	1.519	1.655	-1.664	0.665
213F	-0.142	-1.342	1.421	-0.770	1.230	1.109	1.794	1.794	-1.342	0.471
214V	-0.642	-1.168	1.150	-1.274	0.911	0.620	0.793	1.150	-1.274	0.056
215Y	-0.869	-1.168	1.253	-1.658	1.020	0.645	0.819	1.253	-1.658	0.006
216L	-1.065	-0.222	1.057	-2.036	0.866	0.625	-0.232	1.057	-2.036	-0.144
217A	-0.717	0.341	1.001	-2.312	0.902	0.622	0.105	1.001	-2.312	-0.008
218R	0.149	0.341	1.393	-2.069	1.230	1.110	-0.492	1.393	-2.069	0.237
219A	0.402	-0.568	1.384	-1.538	1.267	1.109	-0.605	1.384	-1.538	0.207
220V	1.116	-0.568	1.468	-0.744	1.257	1.104	-2.050	1.468	-2.050	0.226
221D	0.749	0.383	1.346	-0.225	1.248	1.106	-0.451	1.346	-0.451	0.594
222P	0.617	-0.156	0.917	-0.256	0.774	0.481	-1.460	0.917	-1.460	0.131
223A	0.895	-0.839	1.066	-0.585	0.929	0.501	-0.290	1.066	-0.839	0.240
224V	1.261	-0.803	1.188	-0.915	0.938	0.499	-1.889	1.261	-1.889	0.040
225A	0.123	-0.707	0.776	-1.097	0.601	0.012	-1.558	0.776	-1.558	-0.264
226S	0.079	0.125	0.318	-1.017	0.237	0.011	-1.156	0.318	-1.156	-0.200
227A	0.079	-1.138	0.318	-1.074	0.237	0.011	-1.156	0.318	-1.156	-0.389
228I	0.673	-0.779	0.889	-1.258	0.884	0.604	-1.680	0.889	-1.680	-0.095
229C	0.421	0.121	1.141	-1.376	1.121	0.623	-0.338	1.141	-1.376	0.245
230A	0.142	-0.011	1.234	-1.415	1.239	0.622	-0.277	1.239	-1.415	0.219
231K	0.503	0.616	1.561	-1.349	1.604	1.222	0.706	1.604	-1.349	0.695
232Y	0.775	-0.216	1.580	-1.179	1.613	1.222	0.973	1.613	-1.179	0.681
233P	1.046	0.766	1.786	-1.258	1.658	1.204	0.351	1.786	-1.258	0.793
234E	1.046	1.221	1.786	-1.405	1.658	1.204	0.351	1.786	-1.405	0.837
235V	1.179	1.137	1.664	-1.693	1.385	1.209	0.260	1.664	-1.693	0.734
236G	1.565	1.772	1.842	-1.988	1.622	1.814	-0.073	1.842	-1.988	0.936
237A	1.812	0.940	1.926	-2.124	1.722	1.838	-0.129	1.926	-2.124	0.855
238E	1.951	1.754	1.870	-1.793	1.677	1.727	-0.112	1.951	-1.793	1.010

239R	1.603	1.670	1.907	-1.325	1.695	1.731	-0.266	1.907	-1.325	1.002
240Q	1.508	0.449	2.346	-0.827	2.214	2.355	-0.267	2.355	-0.827	1.111
241D	1.755	0.317	2.674	-0.606	2.588	2.398	0.906	2.674	-0.606	1.433
242L	1.141	0.405	2.599	-0.788	2.461	1.818	1.265	2.599	-0.788	1.271
243R	1.009	1.237	2.412	-0.942	2.260	1.212	1.486	2.412	-0.942	1.239
244Q	0.990	1.279	2.075	-0.937	1.841	1.170	1.323	2.075	-0.937	1.106
245Y	0.718	0.584	1.795	-0.816	1.476	0.681	1.332	1.795	-0.816	0.824
246P	1.710	0.990	2.029	-0.497	1.622	0.695	1.057	2.029	-0.497	1.087
247G	0.863	0.632	1.515	-0.437	1.157	0.076	1.493	1.515	-0.437	0.757
248G	0.617	0.614	1.188	-0.518	0.784	0.034	0.319	1.188	-0.518	0.434
249S	0.869	-0.110	0.935	-0.746	0.547	0.014	-1.023	0.935	-1.023	0.070
250L	1.179	-1.061	0.991	-0.715	0.583	0.036	-1.356	1.179	-1.356	-0.049
251A	0.585	-0.230	0.879	-0.631	0.619	0.037	-0.768	0.879	-0.768	0.070
252A	-0.009	0.397	0.767	-0.193	0.656	0.039	-0.179	0.767	-0.193	0.211
253N	-0.060	0.073	0.608	-0.123	0.455	0.019	-0.339	0.608	-0.339	0.090
254V	0.882	0.003	0.683	-0.320	0.401	0.014	-0.773	0.882	-0.773	0.127
255V	0.244	-0.404	0.543	-1.078	0.382	0.015	0.558	0.558	-1.078	0.037
256G	0.743	0.231	0.814	-1.372	0.701	0.504	1.560	1.560	-1.372	0.454
257G	-0.332	0.231	0.533	-1.634	0.410	0.489	1.695	1.695	-1.634	0.199
258I	0.534	-0.306	0.926	-0.983	0.738	0.976	1.097	1.097	-0.983	0.426
259D	1.129	0.646	1.038	-0.468	0.701	0.975	0.509	1.129	-0.468	0.647
260W	0.901	-0.098	1.206	0.354	0.920	1.595	0.776	1.595	-0.098	0.808
261D	0.901	0.201	1.206	0.721	0.920	1.595	0.776	1.595	0.201	0.903
262G	0.825	0.289	1.262	0.995	0.948	1.598	0.889	1.598	0.289	0.972
263H	-0.389	-0.542	0.907	0.454	0.638	1.115	1.333	1.333	-0.542	0.502
264G	0.604	-0.058	0.879	-0.213	0.574	1.089	1.311	1.311	-0.213	0.598
265L	-0.610	-0.146	0.524	-1.285	0.264	0.606	1.755	1.755	-1.285	0.158
266L	-0.477	0.914	0.860	-1.863	0.674	1.205	1.728	1.728	-1.863	0.435
267G	0.022	0.914	0.973	-1.996	0.820	1.075	1.452	1.452	-1.996	0.466
268L	0.073	0.826	1.132	-1.382	1.020	1.095	1.612	1.612	-1.382	0.625
269E	0.073	1.030	1.132	-0.589	1.020	1.095	1.612	1.612	-0.589	0.767
270D	1.287	0.359	1.487	0.330	1.330	1.578	1.168	1.578	0.330	1.077
271S	1.059	-0.384	1.496	0.653	1.376	1.578	0.157	1.578	-0.384	0.848
272L	1.407	-1.240	1.459	0.519	1.358	1.574	0.311	1.574	-1.240	0.770
273D	0.332	-0.408	1.047	-0.088	1.002	0.980	0.772	1.047	-0.408	0.520
274A	-0.167	-0.456	0.776	-0.888	0.683	0.491	-0.229	0.776	-0.888	0.030
275V	-0.218	0.083	0.618	-1.621	0.483	0.471	-0.388	0.618	-1.621	-0.082
276L	0.692	0.806	0.898	-1.803	0.629	0.486	-0.783	0.898	-1.803	0.132
277A	0.692	1.866	0.898	-1.573	0.629	0.486	-0.783	1.866	-1.573	0.316
278G	0.920	1.770	0.889	-0.900	0.583	0.486	0.228	1.770	-0.900	0.568
279T	1.565	1.633	1.160	-0.016	0.747	0.504	-0.201	1.633	-0.201	0.770
280D	1.913	0.736	1.122	0.428	0.729	0.500	-0.047	1.913	-0.047	0.769
281G	2.109	0.736	1.318	0.567	0.884	0.520	1.003	2.109	0.520	1.020
282S	1.628	0.922	1.580	0.248	1.166	0.540	1.335	1.628	0.248	1.060
283V	1.932	0.694	1.655	0.132	1.330	1.009	1.286	1.932	0.132	1.148
284T	1.565	1.646	1.814	-0.130	1.485	1.144	1.294	1.814	-0.130	1.260
285Y	1.565	1.694	1.814	-0.050	1.485	1.144	1.294	1.814	-0.050	1.278
286D	1.565	2.727	1.814	-0.145	1.485	1.144	1.294	2.727	-0.145	1.412
287R	2.431	2.092	2.206	0.061	1.813	1.632	0.696	2.431	0.061	1.562
288G	2.463	1.183	2.001	0.232	1.613	1.612	0.656	2.463	0.232	1.394
289S	2.349	0.231	1.627	0.533	1.367	1.594	0.912	2.349	0.231	1.230
290D	1.483	-0.266	1.234	0.297	1.039	1.107	1.510	1.510	-0.266	0.915
291G	0.711	-0.178	0.664	-0.386	0.547	0.484	1.832	1.832	-0.386	0.525
292V	0.484	0.051	0.917	-1.179	0.866	0.503	2.052	2.052	-1.179	0.527
293V	0.433	-0.260	0.758	-1.758	0.665	0.483	1.893	1.893	-1.758	0.316
294I	0.212	0.650	0.636	-1.557	0.501	0.014	2.061	2.061	-1.557	0.360
295P	-0.269	1.583	0.898	-0.985	0.784	0.033	2.393	2.393	-0.985	0.634
296G	0.231	2.038	1.449	-0.463	1.267	0.656	1.803	2.038	-0.463	0.997
297S	0.907	1.501	1.870	0.024	1.586	0.695	1.102	1.870	0.024	1.098

298Y	1.679	1.477	2.440	0.182	2.078	1.318	0.779	2.440	0.182	1.422
299R	1.679	1.884	2.356	0.597	1.977	1.919	0.827	2.356	0.597	1.605
300N	1.679	0.974	2.814	0.853	2.661	2.514	0.891	2.814	0.853	1.769
301R	1.401	0.455	2.664	0.901	2.506	2.494	-0.279	2.664	-0.279	1.449
302H	1.287	0.269	2.290	0.356	2.260	2.476	-0.022	2.476	-0.022	1.274
303K	1.154	1.034	2.019	0.046	1.959	2.471	0.246	2.471	0.046	1.276
304A	1.072	0.694	1.711	-0.495	1.604	2.430	0.360	2.430	-0.495	1.054
305V	1.217	0.598	1.431	0.067	1.285	1.826	0.520	1.826	0.067	0.992
306H	1.413	0.598	1.468	0.442	1.267	1.226	0.294	1.468	0.294	0.958
307G	0.819	0.303	0.898	0.829	0.619	0.633	0.817	0.898	0.303	0.703
308S	0.452	0.167	0.776	0.511	0.610	0.634	2.416	2.416	0.167	0.795
309T	0.104	-0.893	0.814	-0.151	0.629	0.638	2.262	2.262	-0.893	0.486
310V	0.300	-0.845	0.851	-1.015	0.610	0.038	2.036	2.036	-1.015	0.282
311V	-0.642	-0.140	0.776	-1.486	0.665	0.044	2.471	2.471	-1.486	0.241
312L	-0.420	0.495	0.898	-1.433	0.829	0.513	2.302	2.302	-1.433	0.455
313T	-0.307	0.375	1.001	-0.666	0.984	0.533	2.148	2.148	-0.666	0.581
314L	0.560	0.375	1.393	0.644	1.312	1.021	1.550	1.550	0.375	0.979
315D	0.288	0.405	1.375	1.693	1.303	1.021	1.283	1.693	0.288	1.053
316N	1.249	-0.540	1.786	2.192	1.668	1.058	1.012	2.192	-0.540	1.203
317D	0.338	-1.246	1.524	1.616	1.467	1.042	1.222	1.616	-1.246	0.852
318I	0.800	-1.294	1.860	0.677	1.695	1.056	1.119	1.860	-1.294	0.845
319Q	-0.066	-0.478	1.468	-0.290	1.367	0.569	1.717	1.717	-0.478	0.612
320F	-0.129	-0.478	1.496	-0.766	1.431	0.570	1.993	1.993	-0.766	0.588
321Y	-0.382	-0.400	1.552	-0.935	1.485	0.124	2.165	2.165	-0.935	0.516
322V	0.503	0.497	2.019	-0.785	1.877	0.165	2.007	2.019	-0.785	0.898
323Q	-0.111	1.084	1.571	-0.763	1.494	0.124	2.432	2.432	-0.763	0.833
324Q	0.850	0.594	1.963	-0.666	1.914	0.162	2.345	2.345	-0.666	1.023
325Q	1.350	0.934	2.038	-0.663	2.050	0.185	2.176	2.176	-0.663	1.153
326V	1.717	1.052	2.160	-0.729	2.060	0.183	0.577	2.160	-0.729	1.003
327Q	1.698	0.944	2.281	-0.939	2.324	0.736	0.479	2.324	-0.939	1.075
328Q	1.761	1.309	2.253	-0.749	2.260	0.734	0.202	2.260	-0.749	1.110
329A	0.800	1.445	1.842	-0.618	1.895	0.697	0.474	1.895	-0.618	0.934
330K	1.445	1.445	2.113	0.039	2.060	0.715	0.045	2.113	0.039	1.123
331N	1.426	0.704	1.776	0.400	1.640	0.673	-0.118	1.776	-0.118	0.929
332L	1.179	0.704	1.449	0.502	1.267	0.631	-1.291	1.449	-1.291	0.634
333S	1.179	0.812	1.608	0.428	1.440	1.250	-0.014	1.608	-0.014	0.958
334G	1.261	0.812	1.459	0.767	1.112	0.696	-0.192	1.459	-0.192	0.845
335A	0.585	0.185	1.038	1.113	0.793	0.657	0.510	1.113	0.185	0.697
336H	1.578	0.089	1.272	2.036	0.938	0.672	0.235	2.036	0.089	0.974
337N	1.299	-0.098	1.122	2.078	0.784	0.652	-0.935	2.078	-0.935	0.700
338V	0.705	-0.911	1.010	1.516	0.820	0.654	-0.347	1.516	-0.911	0.492
339S	0.338	-0.276	0.889	0.416	0.811	0.655	1.252	1.252	-0.276	0.584
340A	-0.376	-1.131	0.646	-0.756	0.647	0.041	1.420	1.420	-1.131	0.070
341V	-0.186	-0.300	0.618	-1.383	0.656	0.489	1.524	1.524	-1.383	0.202
342V	0.180	0.287	0.739	-1.375	0.665	0.487	-0.075	0.739	-1.375	0.130
343L	0.130	1.010	1.038	-1.194	1.148	1.062	-0.170	1.148	-1.194	0.432
344D	0.326	1.790	1.234	-0.892	1.303	1.082	0.881	1.790	-0.892	0.818
345A	0.920	1.155	1.346	-0.886	1.267	1.080	0.293	1.346	-0.886	0.739
346K	1.647	0.950	1.795	-1.121	1.640	1.678	-0.323	1.795	-1.121	0.895
347T	1.995	0.119	1.758	-1.333	1.622	1.674	-0.169	1.995	-1.333	0.809
348G	0.781	-0.486	1.403	-1.701	1.312	1.191	0.275	1.403	-1.701	0.396
349E	0.781	-1.113	1.403	-1.939	1.312	1.191	0.275	1.403	-1.939	0.273
350V	0.155	-1.079	0.945	-2.235	0.720	0.613	0.155	0.945	-2.235	-0.104
351L	-0.041	-0.444	0.748	-2.495	0.565	0.594	-0.896	0.748	-2.495	-0.281
352A	0.041	0.369	1.057	-2.151	0.920	0.634	-1.009	1.057	-2.151	-0.020
353M	0.180	0.860	1.001	-1.271	0.875	0.524	-0.992	1.001	-1.271	0.168
354A	0.857	0.800	1.421	0.404	1.194	0.563	-1.694	1.421	-1.694	0.506
355N	1.767	1.339	1.702	2.033	1.339	0.577	-2.088	2.033	-2.088	0.953
356D	1.053	1.089	1.636	3.068	1.294	0.581	-0.827	3.068	-0.827	1.128

357N	1.951	1.405	1.917	3.161	1.567	1.053	-0.780	3.161	-0.780	1.468
358T	1.951	1.287	2.160	2.644	1.841	1.072	0.450	2.644	0.450	1.629
359F	1.919	1.335	2.010	2.013	1.686	1.051	0.723	2.013	0.723	1.534
360D	1.666	1.185	2.066	1.758	1.741	0.605	0.895	2.066	0.605	1.416
361P	1.856	1.273	2.038	1.722	1.750	1.053	0.999	2.038	0.999	1.527
362S	1.021	1.728	1.702	1.464	1.576	1.035	1.280	1.728	1.021	1.401
363Q	1.963	1.363	1.758	1.009	1.576	1.031	1.029	1.963	1.009	1.390
364D	1.597	1.499	1.917	0.029	1.731	1.167	1.037	1.917	0.029	1.282
365I	1.843	1.499	2.001	-0.774	1.832	1.190	0.980	2.001	-0.774	1.224
366G	1.793	2.655	1.842	-1.491	1.631	1.170	0.821	2.655	-1.491	1.203
367R	2.045	2.519	1.786	-1.347	1.576	1.617	0.649	2.519	-1.347	1.264
368Q	1.774	1.501	1.963	-1.116	1.895	1.722	0.723	1.963	-1.116	1.209
369G	2.659	1.637	2.431	-0.482	2.287	1.763	0.564	2.659	-0.482	1.551
370D	1.717	1.619	2.356	-0.420	2.342	1.768	0.999	2.356	-0.420	1.483
371K	1.812	1.439	1.917	-0.583	1.823	1.144	1.000	1.917	-0.583	1.221
372Q	1.875	0.608	1.889	-0.666	1.759	1.142	0.724	1.889	-0.666	1.047
373L	1.647	0.021	2.141	-0.299	2.078	1.161	0.943	2.141	-0.299	1.099
374G	1.148	1.080	1.870	0.258	1.759	0.672	-0.058	1.870	-0.058	0.961
375N	0.553	1.309	1.300	0.742	1.112	0.079	0.466	1.309	0.079	0.794
376P	0.585	1.058	1.122	0.696	0.893	0.056	0.462	1.122	0.056	0.696
377A	1.578	0.525	1.356	0.402	1.039	0.071	0.187	1.578	0.071	0.737
378V	1.350	1.101	1.608	0.439	1.358	0.090	0.407	1.608	0.090	0.908
379S	0.326	1.555	1.244	0.676	1.002	0.054	0.771	1.555	0.054	0.804
380S	0.686	1.327	1.328	0.920	1.093	0.634	0.525	1.328	0.525	0.930
381P	0.686	1.327	1.571	0.803	1.367	0.653	1.755	1.755	0.653	1.166
382F	1.280	0.872	1.683	0.250	1.330	0.652	1.166	1.683	0.250	1.033
383E	1.280	1.656	1.683	-0.113	1.330	0.652	1.166	1.683	-0.113	1.094
384P	0.636	1.912	1.412	-0.306	1.166	0.633	1.595	1.912	-0.306	1.007
385G	0.945	1.229	1.468	0.196	1.203	0.655	1.262	1.468	0.196	0.994
386S	1.887	0.505	1.982	0.474	1.886	1.245	1.076	1.982	0.474	1.294
387V	0.888	-0.350	1.515	0.689	1.504	0.647	1.424	1.515	-0.350	0.902
388N	0.522	-0.254	1.150	0.169	1.221	0.630	1.793	1.793	-0.254	0.747
389K	0.294	-0.007	1.160	-0.626	1.267	0.630	0.783	1.267	-0.626	0.500
390I	0.016	-0.839	1.010	-1.681	1.112	0.610	-0.387	1.112	-1.681	-0.023
391V	0.661	-0.611	1.281	-1.874	1.276	0.629	-0.816	1.281	-1.874	0.078
392A	0.351	-0.839	0.982	-1.841	0.966	0.588	-1.713	0.982	-1.841	-0.215
393A	-0.243	-0.264	0.412	-1.273	0.319	-0.005	-1.190	0.412	-1.273	-0.321
394S	-0.243	-0.174	0.412	-1.114	0.319	-0.005	-1.190	0.412	-1.190	-0.285
395A	0.484	-0.402	0.860	-1.399	0.692	0.593	-1.805	0.860	-1.805	-0.139
396V	0.484	-0.607	1.019	-1.572	0.866	1.213	-0.527	1.213	-1.572	0.125
397I	0.711	0.345	1.010	-1.435	0.820	1.213	0.483	1.213	-1.435	0.450
398E	-0.281	1.525	0.776	-0.972	0.674	1.198	0.758	1.525	-0.972	0.526
399H	-0.003	1.309	0.926	-0.280	0.829	1.218	1.928	1.928	-0.280	0.847
400G	0.642	1.758	1.197	0.167	0.993	1.237	1.499	1.758	0.167	1.070
401L	1.280	1.706	1.580	0.496	1.285	1.254	1.398	1.706	0.496	1.286
402S	1.420	1.814	1.524	1.079	1.239	1.143	1.415	1.814	1.079	1.376
403S	1.780	0.754	1.692	1.303	1.431	1.123	1.121	1.780	0.754	1.315
404P	1.186	0.389	1.580	1.291	1.467	1.124	1.710	1.710	0.389	1.250
405D	1.186	-0.066	1.580	0.594	1.467	1.124	1.710	1.710	-0.066	1.085
406E	1.154	-0.246	1.758	-0.391	1.686	1.147	1.713	1.758	-0.391	0.974
407V	0.509	-0.194	1.487	-1.260	1.522	1.128	2.142	2.142	-1.260	0.762
408L	0.509	0.758	1.487	-1.438	1.522	1.128	2.142	2.142	-1.438	0.873
409Q	0.237	0.638	1.206	-1.395	1.157	0.639	2.151	2.151	-1.395	0.662
410V	0.155	0.638	1.029	-0.816	0.948	0.060	2.338	2.338	-0.816	0.622
411P	-0.117	0.620	1.010	-0.574	0.938	0.060	2.071	2.071	-0.574	0.572
412G	0.844	0.888	1.421	-0.338	1.303	0.097	1.799	1.799	-0.338	0.859
413S	0.199	0.888	1.085	-0.685	0.975	0.072	1.580	1.580	-0.685	0.588
414I	0.794	-0.064	1.197	-1.048	0.938	0.070	0.992	1.197	-1.048	0.411
415Q	1.021	0.752	0.945	-1.633	0.619	0.051	0.772	1.021	-1.633	0.361

416M	0.427	0.165	0.832	-1.873	0.656	0.053	1.361	1.361	-1.873	0.232
417G	0.345	0.369	0.879	-1.963	0.656	0.053	1.242	1.242	-1.963	0.226
418G	0.617	0.281	0.898	-1.724	0.665	0.052	1.509	1.509	-1.724	0.328
419V	0.370	-0.346	0.730	-1.181	0.465	0.630	1.613	1.613	-1.181	0.326
420T	1.268	-0.753	1.010	-0.304	0.738	1.102	1.659	1.659	-0.753	0.674
421V	1.040	-0.669	1.019	0.583	0.784	1.102	0.649	1.102	-0.669	0.644
422H	0.048	-0.482	1.047	1.062	0.847	1.127	0.671	1.127	-0.482	0.617
423D	0.775	0.055	1.496	0.804	1.221	1.725	0.056	1.725	0.055	0.876
424A	0.579	-0.581	1.459	0.192	1.239	2.325	0.282	2.325	-0.581	0.785
425W	1.173	-0.695	1.571	-0.296	1.203	2.323	-0.306	2.323	-0.695	0.710
426E	0.806	0.167	1.290	-0.373	1.020	1.705	0.015	1.705	-0.373	0.662
427H	-0.092	-0.815	1.010	-0.424	0.747	1.233	-0.031	1.233	-0.815	0.233
428G	-0.092	-0.414	1.253	-0.535	1.020	1.252	1.199	1.253	-0.535	0.526
429V	0.421	-0.550	1.487	-1.041	1.239	1.246	1.509	1.509	-1.041	0.616
430M	0.256	0.037	1.356	-1.129	1.030	0.667	1.576	1.576	-1.129	0.542
431P	0.452	0.778	1.393	-1.026	1.011	0.067	1.349	1.393	-1.026	0.575
432Y	0.421	0.323	1.599	-0.483	1.212	0.087	1.390	1.599	-0.483	0.650
433T	1.015	0.556	1.711	-0.220	1.175	0.085	0.801	1.711	-0.220	0.732
434T	1.046	0.692	1.599	-0.205	1.121	0.070	1.445	1.599	-0.205	0.824
435T	0.332	1.032	1.290	-0.505	0.802	0.055	1.476	1.476	-0.505	0.640
436G	0.813	1.397	1.029	-0.830	0.519	0.035	1.145	1.397	-0.830	0.587
437V	0.844	1.625	1.281	-1.156	1.002	0.610	1.169	1.625	-1.156	0.768
438F	0.926	2.331	1.234	-1.146	1.002	0.610	1.288	2.331	-1.146	0.892
439G	1.009	2.409	1.188	-0.832	1.002	0.610	1.407	2.409	-0.832	0.970
440K	1.091	2.409	1.496	0.124	1.358	0.651	1.294	2.409	0.124	1.203
441S	1.091	2.068	1.496	1.097	1.358	0.651	1.294	2.068	0.651	1.293
442S	2.033	1.008	1.552	1.770	1.358	0.647	1.043	2.033	0.647	1.344
443N	2.001	0.039	1.758	1.641	1.558	0.667	1.083	2.001	0.039	1.250
444V	1.059	-0.775	1.225	0.828	0.929	0.077	1.453	1.453	-0.775	0.685
445G	0.383	0.177	1.066	-0.392	0.820	0.075	1.238	1.238	-0.392	0.481
446T	-0.610	0.041	0.832	-1.325	0.674	0.060	1.513	1.513	-1.325	0.169
447L	-0.642	0.363	0.683	-1.838	0.519	0.039	1.786	1.786	-1.838	0.130
448M	-0.028	0.471	1.132	-1.729	0.902	0.080	1.361	1.361	-1.729	0.313
449L	-0.123	1.213	1.571	-1.326	1.422	0.705	1.360	1.571	-1.326	0.689
450S	-0.686	1.776	1.253	-0.993	1.257	0.687	1.908	1.908	-0.993	0.743
451Q	0.256	1.495	1.328	-0.958	1.203	0.681	1.473	1.495	-0.958	0.783
452R	0.655	1.818	1.580	-1.151	1.431	0.683	1.748	1.818	-1.151	0.966
453V	1.729	0.598	1.991	-1.351	1.786	1.277	1.287	1.991	-1.351	1.045
454G	1.584	0.287	2.272	-1.437	2.105	1.882	1.126	2.272	-1.437	1.117
455P	1.084	0.199	2.197	-1.416	1.968	1.859	1.295	2.197	-1.416	1.027
456E	0.699	-0.274	2.019	-1.464	1.731	1.253	1.628	2.019	-1.464	0.799
457R	1.565	-1.053	2.412	-1.320	2.060	1.741	1.030	2.412	-1.320	0.919
458Y	0.939	-1.053	2.412	-1.096	2.151	1.758	0.975	2.412	-1.096	0.869
459Y	0.225	0.185	2.085	-0.828	1.886	1.744	1.190	2.085	-0.828	0.927
460D	-0.003	0.417	2.188	-0.928	1.996	1.769	1.215	2.188	-0.928	0.951
461M	0.092	0.505	2.206	-1.420	2.160	1.739	1.281	2.206	-1.420	0.938
462L	-0.370	0.415	1.889	-1.997	1.877	1.724	1.200	1.889	-1.997	0.677
463R	0.111	1.247	1.627	-2.175	1.595	1.705	0.868	1.705	-2.175	0.711
464K	-1.103	0.924	1.272	-2.124	1.285	1.221	1.312	1.312	-2.124	0.398
465F	-0.477	0.906	1.272	-1.797	1.194	1.204	1.368	1.368	-1.797	0.524
466G	0.484	1.571	1.683	-1.613	1.558	1.241	1.096	1.683	-1.613	0.860
467L	0.484	1.571	1.683	-1.618	1.558	1.241	1.096	1.683	-1.618	0.859
468G	0.452	1.680	1.431	-1.486	1.075	0.666	1.072	1.680	-1.486	0.698
469Q	1.394	1.680	1.487	-1.433	1.075	0.662	0.821	1.680	-1.433	0.812
470R	0.800	0.984	1.375	-1.331	1.112	0.664	1.409	1.409	-1.331	0.716
471T	1.742	0.529	1.449	-1.341	1.057	0.658	0.975	1.742	-1.341	0.724
472G	0.800	0.666	1.375	-1.493	1.112	0.664	1.409	1.409	-1.493	0.647
473V	0.553	0.614	1.290	-1.590	1.011	0.640	1.466	1.466	-1.590	0.569
474G	0.648	1.565	0.851	-1.531	0.492	0.016	1.467	1.565	-1.531	0.501

475L	0.813	0.938	0.982	-1.422	0.701	0.595	1.400	1.400	-1.422	0.573
476P	0.863	1.770	1.141	-1.078	0.902	0.615	1.560	1.770	-1.078	0.825
477G	1.230	1.207	1.262	-0.863	0.911	0.614	-0.039	1.262	-0.863	0.617
478E	1.230	0.483	1.262	-0.721	0.911	0.614	-0.039	1.262	-0.721	0.534
479S	1.230	0.267	1.262	-0.779	0.911	0.614	-0.039	1.262	-0.779	0.495
480A	0.863	-0.230	0.898	-1.116	0.629	0.596	0.330	0.898	-1.116	0.281
481G	0.636	-0.554	1.150	-1.403	0.948	0.615	0.549	1.150	-1.403	0.277
482L	0.275	-0.643	1.066	-1.354	0.856	0.035	0.795	1.066	-1.354	0.147
483V	-0.642	0.053	0.776	-1.246	0.683	0.017	0.957	0.957	-1.246	0.086
484P	-0.142	-0.354	1.047	-0.651	1.002	0.506	1.958	1.958	-0.651	0.481
485P	-0.123	0.143	1.384	-0.312	1.422	0.548	2.121	2.121	-0.312	0.740
486I	-0.174	0.411	1.487	-0.128	1.431	0.568	1.709	1.709	-0.174	0.758
487D	0.471	1.591	1.758	0.033	1.595	0.586	1.280	1.758	0.033	1.045
488Q	0.699	1.543	1.505	-0.014	1.276	0.567	1.060	1.543	-0.014	0.948
489W	0.977	0.878	1.412	0.077	1.157	0.568	1.000	1.412	0.077	0.867
490S	1.812	1.381	1.748	0.295	1.330	0.586	0.719	1.812	0.295	1.124
491G	0.598	1.135	1.412	0.454	0.966	0.102	0.979	1.412	0.102	0.806
492S	0.351	0.303	1.085	0.440	0.592	0.059	-0.194	1.085	-0.194	0.377
493T	1.426	-0.194	1.365	0.680	0.884	0.075	-0.329	1.426	-0.329	0.558
494F	0.433	-1.009	1.132	0.485	0.738	0.060	-0.054	1.132	-1.009	0.255
495A	0.206	-0.208	1.384	0.752	1.057	0.079	0.165	1.384	-0.208	0.491
496N	-0.711	0.283	1.094	0.497	0.884	0.061	0.327	1.094	-0.711	0.348
497L	-0.680	0.301	0.889	0.129	0.683	0.041	0.287	0.889	-0.680	0.236
498P	0.281	0.301	1.281	-0.619	1.103	0.079	0.199	1.281	-0.619	0.375
499I	0.509	0.798	1.272	-1.088	1.057	0.079	1.209	1.272	-1.088	0.548
500G	-0.515	1.008	0.889	-1.549	0.756	0.044	1.757	1.757	-1.549	0.341
501Q	0.477	0.872	1.122	-1.260	0.902	0.059	1.482	1.482	-1.260	0.522
502G	0.079	0.177	0.870	-1.236	0.674	0.057	1.207	1.207	-1.236	0.261
503L	0.914	-0.655	1.206	-0.941	0.847	0.075	0.926	1.206	-0.941	0.339
504S	-0.028	0.041	1.132	-0.984	0.902	0.080	1.361	1.361	-0.984	0.358
505M	-0.989	-0.929	0.720	-1.147	0.537	0.043	1.632	1.632	-1.147	-0.019
506T	-0.970	-0.324	1.057	-1.402	0.957	0.086	1.795	1.795	-1.402	0.171
507L	-0.654	-0.188	1.132	-1.645	0.993	0.097	1.305	1.305	-1.645	0.149
508L	-0.736	-0.098	1.178	-1.809	0.993	0.097	1.186	1.186	-1.809	0.116
509Q	-0.111	-0.300	1.178	-1.704	0.902	0.080	1.242	1.242	-1.704	0.184
510M	-0.705	-0.300	0.973	-1.717	0.793	0.077	1.146	1.146	-1.717	0.038
511T	-0.243	-0.186	1.309	-1.698	1.020	0.091	1.043	1.309	-1.698	0.191
512G	0.718	-1.001	1.720	-1.680	1.385	0.128	0.771	1.720	-1.680	0.292
513M	0.471	-1.628	1.393	-1.737	1.011	0.086	-0.402	1.393	-1.737	-0.115
514Y	0.231	-0.905	1.262	-1.682	0.948	0.071	-0.025	1.262	-1.682	-0.015
515Q	0.035	0.041	1.066	-1.796	0.793	0.051	-1.076	1.066	-1.796	-0.127
516A	0.117	0.177	1.375	-1.569	1.148	0.091	-1.190	1.375	-1.569	0.021
517I	1.015	0.081	1.655	-0.926	1.422	0.563	-1.143	1.655	-1.143	0.381
518A	1.495	1.219	1.393	0.080	1.139	0.544	-1.475	1.495	-1.475	0.628
519N	0.882	1.123	0.945	0.914	0.756	0.503	-1.050	1.123	-1.050	0.582
520D	1.015	0.872	1.375	0.924	1.230	1.127	-0.040	1.375	-0.040	0.929
521G	1.287	0.692	1.393	0.035	1.239	1.127	0.227	1.393	0.035	0.857
522V	1.287	0.878	1.636	-0.933	1.513	1.146	1.457	1.636	-0.933	0.998
523R	0.977	0.650	1.580	-1.455	1.476	1.125	1.790	1.790	-1.455	0.877
524V	0.610	-0.488	1.739	-1.310	1.631	1.260	1.798	1.798	-1.310	0.749
525P	-0.256	0.439	1.608	-1.015	1.658	1.262	2.119	2.119	-1.015	0.831
526P	-0.528	0.081	1.589	-1.221	1.649	1.262	1.852	1.852	-1.221	0.669
527R	-0.433	0.213	1.608	-1.878	1.813	1.232	1.918	1.918	-1.878	0.639
528I	-0.066	-0.697	1.730	-2.586	1.823	1.231	0.319	1.823	-2.586	0.250
529I	0.130	-0.372	1.683	-2.829	1.704	1.232	0.140	1.704	-2.829	0.241
530K	-0.237	0.311	1.318	-2.620	1.422	1.214	0.509	1.422	-2.620	0.274
531A	-0.370	0.019	0.889	-2.096	0.948	0.590	-0.501	0.948	-2.096	-0.075
532T	0.269	0.646	1.272	-1.593	1.239	0.607	-0.602	1.272	-1.593	0.262
533V	1.407	1.010	1.683	-1.027	1.576	1.094	-0.933	1.683	-1.027	0.687

534A	1.407	1.920	1.225	-0.524	0.893	0.499	-0.998	1.920	-0.998	0.632
535P	1.685	2.411	1.375	0.219	1.048	0.519	0.172	2.411	0.172	1.061
536D	1.622	2.627	1.608	0.491	1.367	1.124	0.131	2.627	0.131	1.281
537G	2.185	2.663	1.926	0.550	1.531	1.142	-0.417	2.663	-0.417	1.369
538S	2.545	2.395	2.253	0.065	1.895	1.742	0.566	2.545	0.065	1.637
539R	2.905	2.353	2.337	-0.533	1.987	2.323	0.320	2.905	-0.533	1.670
540T	2.406	1.898	2.309	-1.056	1.941	1.853	0.549	2.406	-1.056	1.414
541E	2.311	1.946	2.748	-1.278	2.461	2.477	0.548	2.748	-1.278	1.602
542E	2.033	1.910	2.842	-1.291	2.579	2.476	0.608	2.842	-1.291	1.594
543P	2.399	1.010	2.683	-0.819	2.424	2.340	0.600	2.683	-0.819	1.520
544R	2.703	1.465	2.758	-0.089	2.588	2.809	0.550	2.809	-0.089	1.826
545P	1.704	0.556	2.290	0.552	2.205	2.212	0.898	2.290	0.552	1.488
546D	1.476	0.101	2.393	0.831	2.315	2.237	0.924	2.393	0.101	1.468
547D	1.110	0.417	2.029	0.218	2.032	2.219	1.293	2.219	0.218	1.331
548I	0.610	-0.122	1.477	-0.753	1.549	1.596	1.882	1.882	-0.753	0.891
549R	0.888	0.694	1.384	-1.499	1.431	1.597	1.822	1.822	-1.499	0.902
550V	0.389	0.371	1.113	-1.686	1.112	1.108	0.821	1.113	-1.686	0.461
551V	0.136	0.467	1.169	-1.275	1.166	0.662	0.993	1.169	-1.275	0.474
552S	0.971	1.054	1.505	-0.697	1.339	0.680	0.712	1.505	-0.697	0.795
553A	0.838	0.690	1.075	-0.462	0.866	0.055	-0.297	1.075	-0.462	0.395
554Q	1.451	0.594	1.524	-0.486	1.248	0.096	-0.723	1.524	-0.723	0.529
555T	2.014	0.916	1.842	-0.520	1.412	0.115	-1.270	2.014	-1.270	0.644
556A	1.369	0.916	1.571	-0.710	1.248	0.096	-0.842	1.571	-0.842	0.521
557Q	1.502	0.802	2.001	-0.826	1.722	0.721	0.168	2.001	-0.826	0.870
558T	1.502	0.107	2.001	-1.031	1.722	0.721	0.168	2.001	-1.031	0.741
559V	0.907	0.429	1.795	-1.444	1.613	0.718	0.072	1.795	-1.444	0.584
560R	0.193	0.525	1.711	-1.763	1.622	0.723	1.517	1.711	-1.763	0.647
561Q	0.079	-0.384	1.814	-2.145	1.722	1.306	1.353	1.814	-2.145	0.535
562M	-0.117	-0.971	1.617	-2.415	1.567	1.286	0.302	1.617	-2.415	0.181
563L	-0.117	-0.366	1.617	-2.578	1.567	1.286	0.302	1.617	-2.578	0.244
564R	-0.616	0.652	1.066	-2.554	1.084	0.663	0.891	1.084	-2.554	0.169
565A	-0.616	0.377	1.066	-2.396	1.084	0.663	0.891	1.084	-2.396	0.153
566V	-0.085	0.736	1.505	-2.127	1.513	1.270	0.946	1.513	-2.127	0.537
567V	1.129	0.718	1.860	-1.616	1.823	1.754	0.502	1.860	-1.616	0.881
568Q	0.996	1.441	1.674	-1.023	1.622	1.148	0.723	1.674	-1.023	0.940
569R	0.598	0.544	1.664	-0.490	1.668	1.165	1.677	1.677	-0.490	0.975
570D	1.192	0.221	1.776	-0.239	1.631	1.164	1.089	1.776	-0.239	0.976
571P	1.306	0.173	2.150	-0.411	1.877	1.181	0.832	2.150	-0.411	1.016
572M	1.306	0.441	2.150	-0.877	1.877	1.181	0.832	2.150	-0.877	0.987
573G	1.420	1.046	2.047	-1.065	1.777	0.599	0.997	2.047	-1.065	0.974
574Y	1.148	1.046	1.767	-1.082	1.412	0.110	1.006	1.767	-1.082	0.772
575Q	1.344	1.812	1.720	-0.829	1.294	0.111	0.827	1.812	-0.829	0.897
576Q	1.970	1.812	1.720	-0.643	1.203	0.094	0.882	1.970	-0.643	1.005
577G	1.742	1.321	1.973	-0.552	1.522	0.113	1.102	1.973	-0.552	1.031
578T	2.191	1.321	1.917	-0.473	1.440	0.114	0.810	2.191	-0.473	1.046
579G	1.944	0.734	1.589	-0.387	1.066	0.071	-0.363	1.944	-0.387	0.665
580P	1.925	0.465	1.253	-0.418	0.647	0.029	-0.526	1.925	-0.526	0.482
581T	1.331	0.734	1.141	-0.652	0.683	0.030	0.062	1.331	-0.652	0.476
582A	1.135	-0.164	1.188	-0.963	0.802	0.029	0.242	1.188	-0.963	0.324
583G	1.135	0.327	1.188	-1.163	0.802	0.029	0.242	1.188	-1.163	0.366
584V	0.882	-0.414	1.197	-1.135	0.765	0.030	0.354	1.197	-1.135	0.240
585P	0.933	-0.318	1.328	-0.970	0.984	0.052	0.476	1.328	-0.970	0.355
586G	0.534	-0.050	1.318	-0.937	1.030	0.069	1.431	1.431	-0.937	0.485
587Y	0.307	0.155	1.328	-1.151	1.075	0.069	0.421	1.328	-1.151	0.315
588Q	0.901	1.052	1.440	-1.485	1.039	0.068	-0.168	1.440	-1.485	0.407
589M	1.129	1.189	1.646	-1.916	1.403	0.643	-0.323	1.646	-1.916	0.539
590A	1.097	1.794	1.851	-2.009	1.604	0.663	-0.282	1.851	-2.009	0.674
591G	1.578	1.794	1.589	-1.915	1.321	0.644	-0.614	1.794	-1.915	0.628
592K	1.527	1.658	1.459	-1.583	1.103	0.622	-0.736	1.658	-1.583	0.578

593T	1.925	1.317	1.468	-1.240	1.057	0.604	-1.691	1.925	-1.691	0.491
594G	2.172	0.501	1.795	-0.962	1.431	0.647	-0.518	2.172	-0.962	0.724
595T	2.191	0.483	2.132	-0.857	1.850	0.689	-0.355	2.191	-0.857	0.876
596A	1.325	0.351	1.543	-0.888	1.194	0.096	-0.098	1.543	-0.888	0.503
597Q	1.438	0.978	1.646	-0.659	1.349	0.117	-0.252	1.646	-0.659	0.660
598Q	1.211	0.523	1.898	-0.250	1.668	0.136	-0.032	1.898	-0.250	0.736
599I	1.242	0.660	1.692	0.314	1.467	0.116	-0.073	1.692	-0.073	0.774
600N	1.198	1.020	1.477	0.860	1.376	0.134	1.560	1.560	0.134	1.089
601P	1.179	0.005	1.141	0.904	0.957	0.091	1.397	1.397	0.005	0.811
602G	0.888	-0.528	0.599	0.620	0.492	0.067	1.856	1.856	-0.528	0.570
603C	1.274	-0.617	0.991	0.318	0.747	0.084	1.866	1.866	-0.617	0.666
604G	0.250	-0.114	0.627	0.001	0.392	0.048	2.230	2.230	-0.114	0.490
605C	0.749	-0.837	0.655	0.115	0.437	0.518	2.001	2.001	-0.837	0.520
606Y	1.021	-1.280	0.935	0.571	0.802	1.007	1.992	1.992	-1.280	0.721
607F	0.699	-1.376	1.029	0.891	0.884	0.991	1.958	1.958	-1.376	0.725
608D	0.218	-1.526	1.290	1.170	1.166	1.010	2.290	2.290	-1.526	0.803
609D	-0.503	-1.574	1.524	0.747	1.276	1.017	1.690	1.690	-1.574	0.597
610V	-0.888	-2.288	1.132	-0.148	1.020	1.000	1.680	1.680	-2.288	0.215
611Y	0.022	-2.191	1.393	-1.090	1.221	1.016	1.469	1.469	-2.191	0.263
612W	-1.192	-1.158	1.057	-1.667	0.856	0.531	1.730	1.730	-1.667	0.023
613I	-1.691	-0.979	0.786	-1.751	0.537	0.042	0.728	0.786	-1.751	-0.333
614T	-1.097	-0.655	0.898	-1.430	0.501	0.040	0.140	0.898	-1.430	-0.229
615F	-1.482	-0.655	0.505	-1.383	0.246	0.023	0.130	0.505	-1.482	-0.374
616A	-0.717	-0.480	0.487	-1.598	0.228	-0.002	-0.903	0.487	-1.598	-0.427
617G	0.117	0.059	0.823	-1.854	0.401	0.016	-1.184	0.823	-1.854	-0.232
618I	-0.079	0.041	0.627	-2.047	0.246	-0.004	-2.235	0.627	-2.235	-0.493
619A	1.135	0.724	0.963	-1.647	0.610	0.481	-2.495	1.135	-2.495	-0.033
620T	1.445	1.537	1.262	-0.624	0.920	0.521	-1.598	1.537	-1.598	0.495
621A	1.217	0.640	1.515	0.604	1.239	0.540	-1.378	1.515	-1.378	0.625
622D	1.989	0.544	2.085	1.590	1.731	1.163	-1.701	2.085	-1.701	1.057
623N	1.736	-0.320	2.337	1.828	1.968	1.182	-0.358	2.337	-0.358	1.196
624P	1.173	-0.302	2.019	1.036	1.804	1.164	0.190	2.019	-0.302	1.012
625R	0.534	-0.985	1.879	-0.210	1.786	1.166	1.521	1.879	-0.985	0.813
626Y	0.263	-1.913	1.599	-1.384	1.422	0.677	1.531	1.599	-1.913	0.313
627V	-0.686	-1.711	1.160	-2.239	1.093	0.638	1.965	1.965	-2.239	0.032
628I	-1.084	-1.075	0.907	-2.662	0.866	0.636	1.690	1.690	-2.662	-0.103
629G	-1.931	-0.142	0.393	-2.888	0.401	0.017	2.126	2.126	-2.888	-0.289
630I	-1.179	-0.410	0.412	-2.737	0.483	0.487	1.785	1.785	-2.737	-0.166
631M	-0.503	-0.086	0.832	-1.876	0.802	0.526	1.083	1.083	-1.876	0.111
632L	0.136	0.842	1.216	-0.413	1.093	0.543	0.982	1.216	-0.413	0.628
633D	-0.092	1.656	1.225	0.966	1.139	0.543	-0.029	1.656	-0.092	0.773
634N	0.680	1.972	1.795	1.542	1.631	1.166	-0.351	1.972	-0.351	1.205
635P	1.388	1.902	2.103	1.415	1.895	1.189	-0.409	2.103	-0.409	1.355
636A	2.381	2.170	2.337	0.977	2.041	1.204	-0.684	2.381	-0.684	1.489
637R	2.381	2.170	2.337	1.172	2.041	1.204	-0.684	2.381	-0.684	1.517
638N	2.298	1.716	2.029	1.616	1.686	1.163	-0.571	2.298	-0.571	1.419
639S	2.298	1.734	1.786	1.906	1.412	1.144	-1.801	2.298	-1.801	1.211
640D	2.298	0.968	2.029	1.456	1.686	1.163	-0.571	2.298	-0.571	1.290
641G	2.393	1.285	1.589	0.590	1.166	0.538	-0.570	2.393	-0.570	0.999
642A	2.083	0.658	1.449	0.036	1.030	1.118	-0.190	2.083	-0.190	0.883
643P	2.083	0.658	1.449	0.278	1.030	1.118	-0.190	2.083	-0.190	0.918
644G	1.584	0.658	1.178	0.834	0.711	0.629	-1.191	1.584	-1.191	0.629
645H	1.356	-0.174	1.188	1.173	0.756	0.629	-2.201	1.356	-2.201	0.390
646S	1.356	-0.438	1.431	0.997	1.030	0.648	-0.971	1.431	-0.971	0.579
647A	0.642	-1.204	1.103	0.144	0.765	0.634	-0.756	1.103	-1.204	0.190
648A	-0.300	-0.595	1.047	-0.436	0.765	0.638	-0.505	1.047	-0.595	0.088
649P	-0.300	-0.919	1.047	-0.543	0.765	0.638	-0.505	1.047	-0.919	0.026
650L	-0.269	-1.278	1.197	0.234	0.920	0.659	-0.778	1.197	-1.278	0.098
651F	-0.907	-0.446	1.057	1.179	0.902	0.661	0.554	1.179	-0.907	0.428

652H	-0.907	-0.775	1.057	1.829	0.902	0.661	0.554	1.829	-0.907	0.474
653N	-0.680	-1.069	0.804	1.406	0.583	0.642	0.334	1.406	-1.069	0.289
654I	-0.730	-1.793	0.907	0.298	0.592	0.662	-0.079	0.907	-1.793	-0.020
655A	-0.730	-0.977	0.889	-1.025	0.647	0.663	0.105	0.889	-1.025	-0.061
656G	-1.128	-0.164	0.720	-1.993	0.519	0.060	-0.217	0.720	-1.993	-0.315
657W	-1.192	-0.216	0.748	-2.417	0.583	0.062	0.059	0.748	-2.417	-0.339
658L	-0.420	0.896	1.318	-2.422	1.075	0.685	-0.264	1.318	-2.422	0.124
659M	-0.060	1.004	1.646	-2.346	1.440	1.284	0.720	1.646	-2.346	0.527
660Q	0.022	1.477	1.954	-1.808	1.795	1.325	0.607	1.954	-1.808	0.767
661R	0.421	0.782	1.814	-1.177	1.768	1.301	1.173	1.814	-1.177	0.869
662E	1.135	0.824	2.141	-0.285	2.032	1.315	0.958	2.141	-0.285	1.160
663N	0.819	0.608	2.066	0.208	1.996	1.303	1.449	2.066	0.208	1.207
664V	0.850	0.538	1.889	0.405	1.777	1.281	1.445	1.889	0.405	1.169
665P	0.718	0.992	1.702	0.277	1.576	0.675	1.666	1.702	0.277	1.087
666L	0.857	1.261	1.646	0.553	1.531	0.564	1.683	1.683	0.553	1.156
667S	0.547	1.824	1.589	0.804	1.494	0.543	2.016	2.016	0.543	1.260
668P	1.141	1.327	1.702	1.314	1.458	0.541	1.428	1.702	0.541	1.273
669D	1.141	0.764	1.702	1.319	1.458	0.541	1.428	1.702	0.541	1.193
670P	1.856	0.129	2.029	1.108	1.722	0.555	1.213	2.029	0.129	1.230
671G	0.863	-0.434	1.795	0.528	1.576	0.540	1.488	1.795	-0.434	0.908
672P	0.496	-0.570	1.431	0.038	1.294	0.523	1.857	1.857	-0.570	0.724
673P	-0.717	-0.929	1.075	-0.602	0.984	0.039	2.301	2.301	-0.929	0.307
674L	-0.471	-0.797	1.160	-1.150	1.084	0.063	2.244	2.244	-1.150	0.305
675V	-0.698	-0.338	1.169	-1.574	1.130	0.063	1.234	1.234	-1.574	0.141
676L	-0.503	0.013	1.122	-1.625	1.011	0.064	1.054	1.122	-1.625	0.162
677Q	-0.635	0.471	0.421	-1.425	1.057	0.105	-0.176	1.057	-1.425	-0.026
678A	-0.054	0.235	0.047	-0.990	1.367	0.159	-1.621	1.367	-1.621	-0.122
679T	0.180	0.489	-0.289	-0.679	1.695	0.218	-3.220	1.695	-3.220	-0.229

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]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]
Hydrophilicity	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]
Flexibility	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]
Accessibility	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]

Turns	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]
Exposed Surface	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]
Polarity	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]
Antigenic Propensity	[1]VSRAAPRRASQSQSTRPARGLRRPPGAQEVGQRKRPGKTQKARQAQEATKSRPATRSDVAPAG RSTRARRTRQVVDVGTRGASFVFRHRTGNAVILVLMLVAATQLFFLQVSHAAGLRAQAAGQLKVTD VQPAARGSIVDRNNDRLAFTIEARALTFQPKRIRRQLEEARKKTSAAPDPQQRLRDIAQEVAGKLNN KPDAAAVLKKLQSDETFVYLARAVDPAVASAICAKYPEVGAERQDLRQYPGGSLAANVVGGIDWDG HGLLGLEDSLDAVLAGTDGSVTYDRGSDGVVIPGSYRNRHKAVHGSTVVLTLDNDIQFYVQQQVQQ AKNLSGAHNVSAVVLDAKTGEVLAMANDNTFDPSQDIGRQGDKQLGNPAVSSPFEPGSVNKIVAAS AVIEHGLSSPDEVLQVPGSIQMGGVTVHDAWEHGVMPYTTTGVFGKSSNVGTLMLSQRVGPERYY DMLRKFGLGQRTGVGLPGESAGLVPPIDQWSGSTFANLPIGQGLSMTLLQMTGMYQAIANDGVRV PPRIIKATVAPDGSRTEEPRPDDIRVVSAQTAQTVRQMLRAVVQRDPMGYQQGTGPTAGVPGYQM AGKTGTAQQINPGCGCYFDDVYWITFAGIATADNPRYVIGIMLDNPARNSDGAPGHSAAPLFHNIAG WLMQRENVPLSPDPGPPLVLQAT[679]

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