

BcePred Prediction Server

The server displays 1.[GRAPHICAL RESULT](#) 2.[TABULAR RESULT](#) 3.[Overlap Display](#)

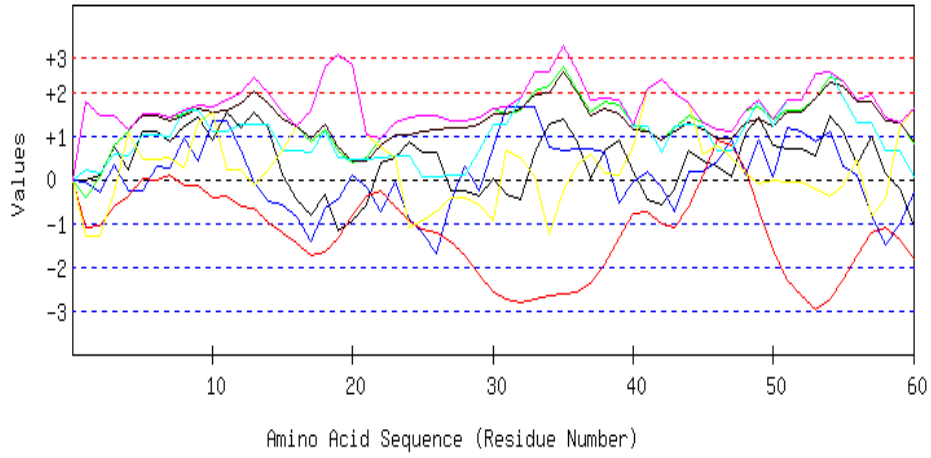
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Seq=VVQPADIDVPETPARPVLVVDGFAQYAQLIARRVREARVFSEVIPHTASIEEIRARQPVA  
LVLSGGPASVYADGAPKLDPALDLGVPVLGICYGFQAMAQALGGIVAHTGTREYGRTEL  
KVLGGKLHSDLPEVQPVWMSHGDAVTAAPDGFDDVASSAGAPVAAFEAFDRRLAGVQYHPE  
VMHTPHGQQVLSRFLHDFAGLGAQWTPANIANALIEQVRTQIGDGHAICGLSGGVDSAV  
AAALVQRAIGDRLTCVFDHGLLRAGERAQVQRDFVAATGANLVTVDAAETFLEALSGVS  
APEGKRKIIQRQFIRAFEGAVRDVLDGKTAEFLVQGTLYPDVVESGGGSGTANIKSHHNV  
GGLPDDLKFTLVEPLRLLFKDEVRAVGRELGLPEEIVARQPPGPGGLGIRIVGEVTAKRL  
DTLRHADSIVREELTAAGLDNQIWQCPVLLADVRSVGVQGDGRTYGHPIVLRPVSEDA  
MTADWTRVPYEVLERISTRITNEVAEVNRVVLDTISKPPATIEWE

Length=525

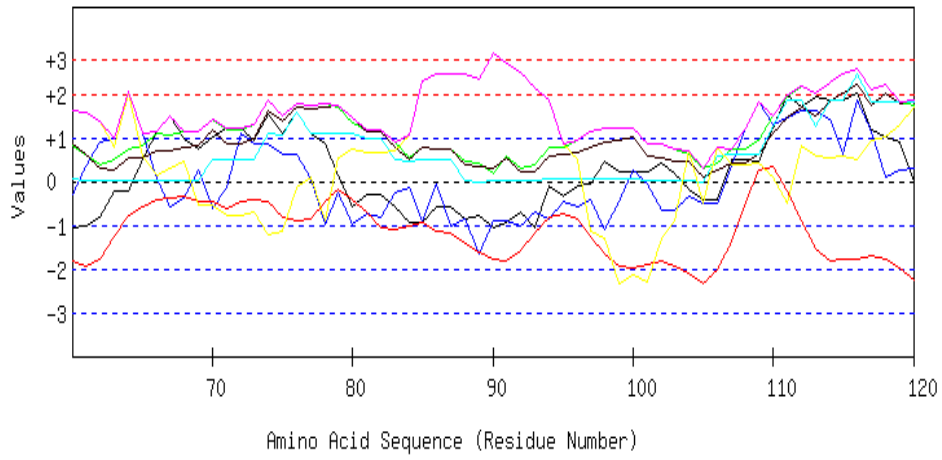
**GRAPHICAL RESULT**

GRAPHICAL RESULT :: SEQ 1 to 60



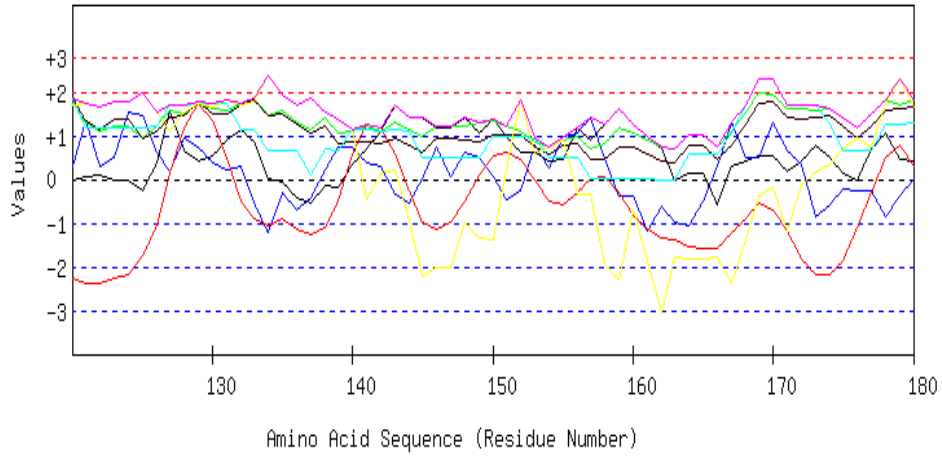
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 61 to 120



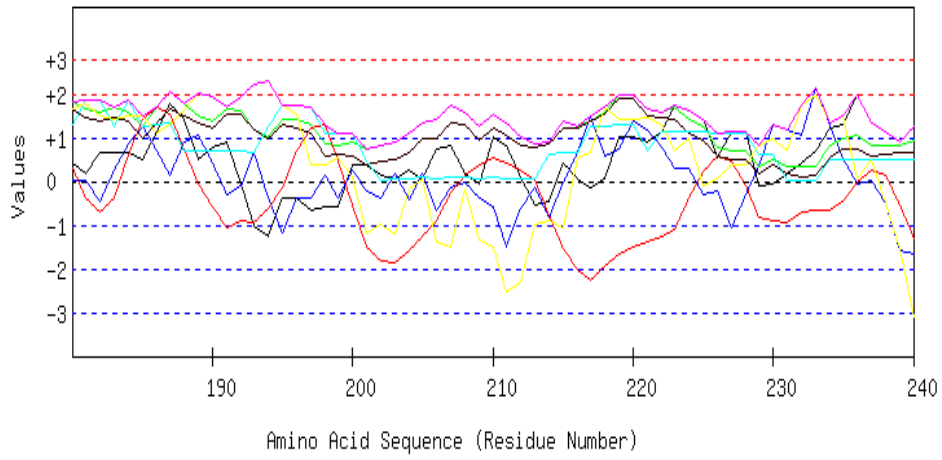
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 121 to 180



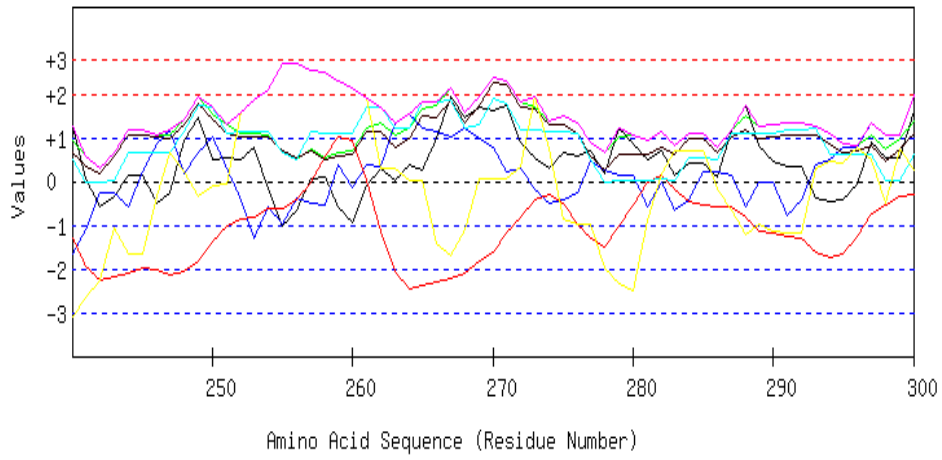
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 181 to 240



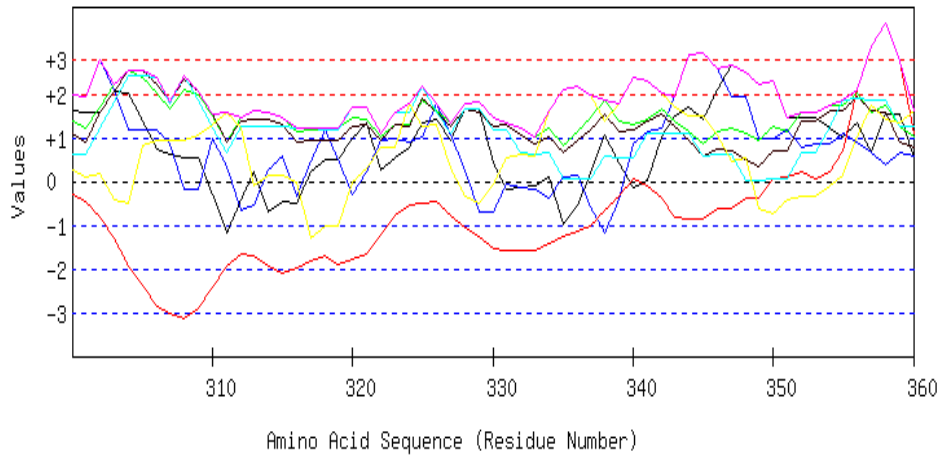
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 241 to 300



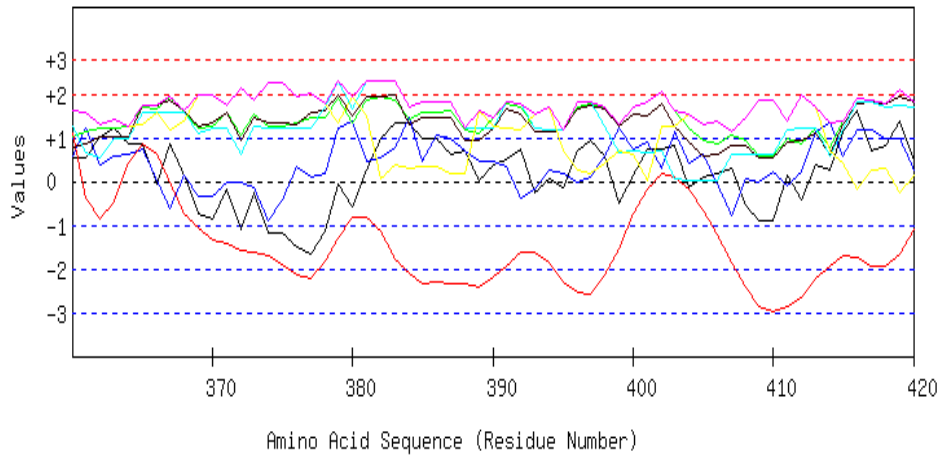
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 301 to 360



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

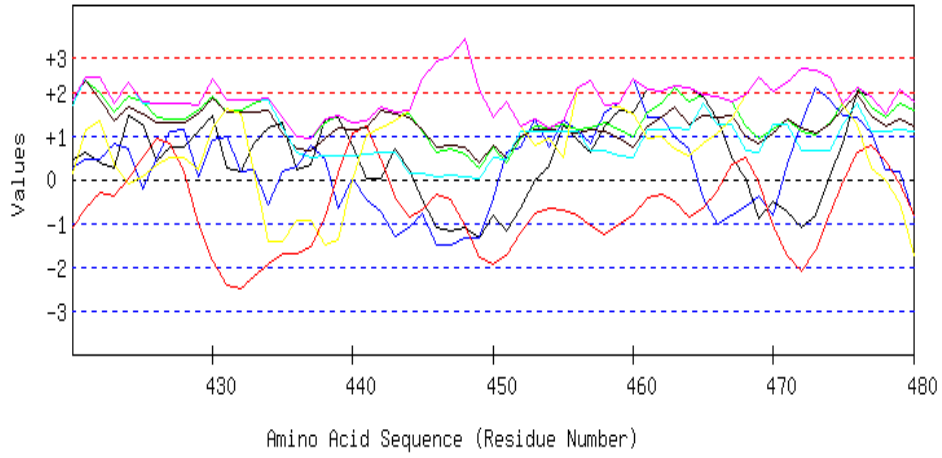
GRAPHICAL RESULT :: SEQ 361 to 420



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

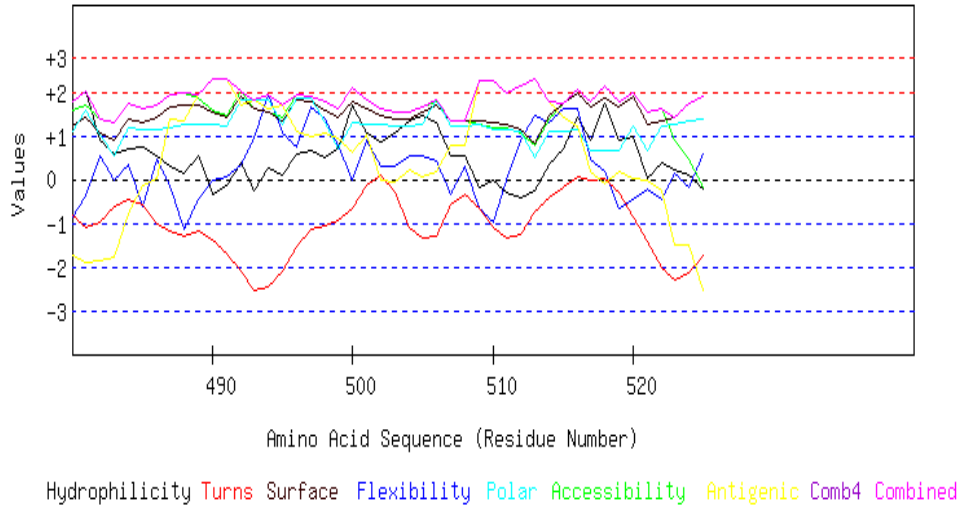


GRAPHICAL RESULT :: SEQ 421 to 480



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 481 to 540



[TOP](#)

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**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

VVQPADIDVPETPARPVLVVDFFGAQYAQLIARRVREARVFSEVIPHTASIEEIRARQPVA  
LVLSGGPASVYADGAPKLDPALLDLGVVPLGICYGFQAMAQALGGIVAHGTREYGRTEL  
KVLGGKLSHSDLPEVQPVWMSHGDAVTAAPDGFVVDVASSAGAPVAAFEAFDRRLAGVQYHP  
EVMHTPHGQQVLSRFLHDFAGLGAQWTPANIANALIEQVRTQIGDGHAI CGLSGGVDSAV  
AAALVQRAIGDRLTCVFVDHGLLRAGERAQVQRFVAATGANLVTVDAAETFLEALSGVS  
APEGKRKIIGRQFIRAFEGAVRDVLDGKTAEFVQGTLYPDVVESSGGSGTANIKSHHNV  
GGLPDDLKFTLVEPLRLLFKDEVRAVGRELGLPEEIVARQPFPGPLGIRIVGEVTAKRL  
DTLRHADSIVREELTAAGLDNQIWQCPVLLADVRSVGVQGDGRTYGHPIVLRPVSEDA  
MTADWTRVPYEVLERISTRITNEVAEVNRVVDITSKPPATIEWE

Length=525

A.A.

Parameter  
Combined

MIN	AVG	Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX
1 V	-0.035	-0.078	-0.401	-1.089	1.786	0.215	-1.288	1.786	
-1.288	-0.127								
2 V	0.098	-0.306	0.057	-1.071	1.467	0.154	-1.288	1.467	
-1.288	-0.127								
3 Q	0.730	0.329	0.786	-0.624	1.467	0.583	-0.287	1.467	
-0.624	0.426								
4 P	0.225	-0.258	1.103	-0.399	1.130	0.525	1.045	1.130	
-0.399	0.482								
5 A	1.091	-0.258	1.496	0.003	1.458	1.012	0.447	1.496	
-0.258	0.750								
6 D	1.091	0.317	1.496	-0.016	1.458	1.012	0.447	1.496	
-0.016	0.829								
7 I	0.844	0.269	1.412	0.080	1.358	0.989	0.504	1.412	
0.080	0.779								
8 D	1.205	0.952	1.496	-0.154	1.449	1.570	0.258	1.570	
-0.154	0.968								
9 V	1.401	0.413	1.692	-0.158	1.604	1.590	1.309	1.692	
-0.158	1.121								
10 P	0.901	1.323	1.664	-0.416	1.558	1.120	1.538	1.664	
-0.416	1.098								
11 E	1.540	1.323	1.804	-0.374	1.576	1.118	0.206	1.804	
-0.374	1.028								
12 T	1.173	0.652	1.963	-0.628	1.731	1.254	0.214	1.963	
-0.628	0.908								
13 P	1.540	-0.044	2.328	-0.661	2.014	1.271	-0.155	2.328	
-0.661	0.899								
14 A	1.173	-0.498	1.963	-1.000	1.731	1.254	0.214	1.963	
-1.000	0.691								
15 R	0.098	-0.595	1.552	-1.201	1.376	0.659	0.675	1.552	
-1.201	0.367								
16 P	-0.465	-0.869	1.234	-1.455	1.212	0.641	1.223	1.234	
-1.455	0.217								
17 V	-0.831	-1.402	0.870	-1.724	0.929	0.624	1.592	1.592	
-1.724	0.008								
18 L	-0.332	-0.679	1.141	-1.677	1.248	1.113	2.593	2.593	
-1.677	0.487								
19 V	-1.179	-0.474	0.646	-1.349	0.729	0.492	2.845	2.845	
-1.349	0.244								
20 V	-0.951	0.113	0.393	-0.818	0.410	0.473	2.625	2.625	
-0.951	0.321								
21 D	-0.585	-0.198	0.515	-0.361	0.419	0.472	1.027	1.027	
-0.585	0.184								
22 F	0.376	-0.737	0.926	-0.271	0.784	0.509	0.755	0.926	
-0.737	0.334								
23 G	0.490	-0.072	1.300	-0.605	1.030	0.526	0.498	1.300	
-0.605	0.452								
24 A	0.857	-0.903	1.421	-0.922	1.039	0.525	-1.101	1.421	
-1.101	0.131								
25 Q	0.604	-1.228	1.477	-1.140	1.093	0.078	-0.928	1.477	
-1.228	-0.006								
26 Y	0.604	-1.719	1.459	-1.219	1.148	0.079	-0.744	1.459	
-1.719	-0.056								

27 A	-0.262	-0.498	1.328	-1.410	1.175	0.081	-0.423	1.328
-1.410	-0.001							
28 Q	-0.262	0.315	1.328	-1.729	1.175	0.081	-0.423	1.328
-1.729	0.069							
29 L	-0.376	-0.272	1.431	-2.189	1.276	0.663	-0.587	1.431
-2.189	-0.008							
30 I	0.010	0.746	1.608	-2.567	1.513	1.269	-0.920	1.608
-2.567	0.237							
31 A	-0.357	1.646	1.487	-2.732	1.504	1.270	0.679	1.646
-2.732	0.499							
32 R	-0.471	1.646	1.589	-2.812	1.604	1.853	0.514	1.853
-2.812	0.560							
33 R	0.604	1.646	2.001	-2.750	1.959	2.447	0.053	2.447
-2.750	0.851							
34 V	1.242	0.736	2.141	-2.654	1.977	2.445	-1.279	2.445
-2.654	0.658							
35 R	1.375	0.658	2.571	-2.623	2.451	3.070	-0.269	3.070
-2.623	1.033							
36 E	0.876	0.700	2.019	-2.561	1.968	2.447	0.320	2.447
-2.561	0.824							
37 A	0.029	0.700	1.524	-2.387	1.449	1.826	0.572	1.826
-2.387	0.530							
38 R	0.673	0.604	1.795	-1.928	1.613	1.845	0.143	1.845
-1.928	0.678							
39 V	0.901	-0.534	1.692	-1.345	1.504	1.819	0.118	1.819
-1.345	0.594							
40 F	0.174	-0.080	1.244	-0.782	1.130	1.221	0.733	1.244
-0.782	0.520							
41 S	-0.465	0.185	1.103	-0.757	1.112	1.223	2.065	2.065
-0.757	0.638							
42 E	-0.597	-0.180	0.917	-1.008	0.911	0.618	2.286	2.286
-1.008	0.421							
43 V	-0.231	-0.755	1.197	-1.081	1.093	1.236	1.964	1.964
-1.081	0.489							
44 I	0.680	0.197	1.459	-0.631	1.294	1.252	1.754	1.754
-0.631	0.858							
45 P	0.402	0.197	1.309	0.115	1.139	1.232	0.584	1.309
0.115	0.711							
46 H	0.319	0.413	1.132	0.899	0.929	0.652	0.770	1.132
0.319	0.731							
47 T	0.048	0.898	1.113	0.783	0.920	0.652	0.503	1.113
0.048	0.702							
48 A	1.046	0.083	1.580	0.214	1.303	1.250	0.155	1.580
0.083	0.805							
49 S	1.407	0.896	1.664	-0.695	1.394	1.831	-0.091	1.831
-0.695	0.915							
50 I	0.768	0.041	1.365	-1.616	1.203	1.213	-0.037	1.365
-1.616	0.419							
51 E	0.705	1.179	1.599	-2.304	1.522	1.817	-0.079	1.817
-2.304	0.634							
52 E	0.705	1.095	1.599	-2.675	1.522	1.817	-0.079	1.817
-2.675	0.569							
53 I	0.560	0.878	1.879	-2.966	1.841	2.422	-0.239	2.422
-2.966	0.625							
54 R	1.445	1.107	2.346	-2.745	2.233	2.463	-0.398	2.463
-2.745	0.922							
55 A	1.084	0.293	2.262	-2.297	2.142	1.882	-0.151	2.262
-2.297	0.745							
56 R	0.357	0.089	1.814	-1.738	1.768	1.284	0.464	1.814

-1.738	0.577							
57 Q	0.996	-0.821	1.954	-1.221	1.786	1.282	-0.868	1.954
-1.221	0.444							
58 P	0.149	-1.516	1.440	-1.101	1.321	0.663	-0.432	1.440
-1.516	0.075							
59 V	-0.218	-1.019	1.318	-1.373	1.312	0.664	1.166	1.318
-1.373	0.264							
60 A	-1.065	-0.296	0.804	-1.821	0.847	0.045	1.602	1.602
-1.821	0.017							
61 L	-1.034	0.331	0.627	-1.930	0.629	0.023	1.599	1.599
-1.930	0.035							
62 V	-0.806	0.894	0.375	-1.783	0.310	0.004	1.379	1.379
-1.783	0.053							
63 L	-0.212	0.990	0.487	-1.258	0.273	0.002	0.791	0.990
-1.258	0.153							
64 S	-0.212	2.050	0.730	-0.780	0.547	0.021	2.021	2.050
-0.780	0.625							
65 G	0.503	1.099	0.814	-0.585	0.537	0.016	0.576	1.099
-0.585	0.423							
66 G	1.148	0.065	1.085	-0.423	0.701	0.034	0.147	1.148
-0.423	0.394							
67 P	1.495	-0.562	1.047	-0.362	0.683	0.031	0.301	1.495
-0.562	0.376							
68 A	0.964	-0.382	1.150	-0.338	0.765	0.030	0.473	1.150
-0.382	0.380							
69 S	0.737	0.245	1.160	-0.463	0.811	0.030	-0.538	1.160
-0.538	0.283							
70 V	1.009	-0.611	1.440	-0.465	1.175	0.519	-0.547	1.440
-0.611	0.360							
71 Y	1.236	-0.156	1.188	-0.632	0.856	0.500	-0.766	1.236
-0.766	0.318							
72 A	1.236	1.082	1.188	-0.459	0.856	0.500	-0.766	1.236
-0.766	0.520							
73 D	0.958	0.878	1.281	-0.411	0.975	0.499	-0.706	1.281
-0.706	0.496							
74 G	1.552	0.878	1.851	-0.465	1.622	1.092	-1.230	1.851
-1.230	0.757							
75 A	1.091	0.610	1.515	-0.812	1.394	1.078	-1.127	1.515
-1.127	0.535							
76 P	1.590	0.610	1.786	-0.898	1.713	1.567	-0.126	1.786
-0.898	0.892							
77 K	1.091	0.047	1.758	-0.864	1.668	1.097	0.103	1.758
-0.864	0.700							
78 L	0.863	-0.989	1.767	-0.476	1.713	1.097	-0.907	1.767
-0.989	0.438							
79 D	0.149	-0.246	1.683	-0.181	1.722	1.102	0.538	1.722
-0.246	0.681							
80 P	-0.566	-0.989	1.356	-0.412	1.458	1.089	0.753	1.458
-0.989	0.384							
81 A	-0.294	-0.721	1.178	-0.711	1.139	0.983	0.679	1.178
-0.721	0.322							
82 L	-0.294	-0.817	1.178	-1.054	1.139	0.983	0.679	1.178
-1.054	0.259							
83 L	-0.566	-0.254	0.898	-1.086	0.774	0.494	0.688	0.898
-1.086	0.135							
84 D	-0.932	-0.146	0.533	-1.033	0.492	0.477	1.057	1.057
-1.033	0.064							
85 L	-0.932	-0.889	0.776	-0.935	0.765	0.496	2.287	2.287
-0.935	0.224							

86 G	-0.585	-0.058	0.739	-1.125	0.747	0.492	2.440	2.440
-1.125	0.379							
87 V	-0.585	-1.009	0.739	-1.187	0.747	0.492	2.440	2.440
-1.187	0.234							
88 P	-0.857	-0.877	0.459	-1.406	0.382	0.003	2.450	2.450
-1.406	0.022							
89 V	-0.781	-1.642	0.403	-1.616	0.355	-0.001	2.336	2.336
-1.642	-0.135							
90 L	-1.053	-0.919	0.197	-1.798	0.310	0.017	2.958	2.958
-1.798	-0.041							
91 G	-0.939	-0.889	0.571	-1.808	0.556	0.035	2.702	2.702
-1.808	0.032							
92 I	-0.711	-1.025	0.318	-1.583	0.237	0.016	2.482	2.482
-1.583	-0.038							
93 C	-1.059	-0.701	0.375	-1.162	0.200	0.018	2.145	2.145
-1.162	-0.026							
94 Y	-0.098	-0.851	0.786	-0.803	0.565	0.055	1.873	1.873
-0.851	0.218							
95 G	-0.325	-0.444	0.795	-0.738	0.610	0.055	0.862	0.862
-0.738	0.116							
96 F	-0.085	-0.581	0.926	-0.841	0.674	0.071	0.486	0.926
-0.841	0.093							
97 Q	-0.041	-0.406	1.141	-1.275	0.765	0.053	-1.147	1.141
-1.275	-0.130							
98 A	0.459	-1.101	1.216	-1.660	0.902	0.076	-1.316	1.216
-1.660	-0.204							
99 M	0.231	-0.474	1.225	-1.932	0.948	0.076	-2.326	1.225
-2.326	-0.322							
100A	0.231	0.267	1.206	-1.984	1.002	0.077	-2.142	1.206
-2.142	-0.192							
101Q	0.212	-0.058	0.870	-1.895	0.583	0.035	-2.305	0.870
-2.305	-0.365							
102A	0.440	-0.645	0.860	-1.835	0.537	0.035	-1.295	0.860
-1.835	-0.272							
103L	0.199	-0.645	0.730	-1.950	0.474	0.019	-0.918	0.730
-1.950	-0.299							
104G	-0.167	-0.350	0.608	-2.114	0.465	0.021	0.681	0.681
-2.114	-0.122							
105G	-0.414	-0.486	0.281	-2.335	0.091	-0.021	-0.492	0.281
-2.335	-0.482							
106I	-0.414	-0.486	0.440	-2.015	0.264	0.598	0.785	0.785
-2.015	-0.118							
107V	0.496	0.329	0.720	-1.391	0.410	0.613	0.391	0.720
-1.391	0.224							
108A	0.496	1.239	0.720	-0.455	0.410	0.613	0.391	1.239
-0.455	0.488							
109H	0.465	1.814	0.926	0.260	0.610	0.633	0.431	1.814
0.260	0.734							
110T	1.236	1.317	1.496	0.350	1.103	1.256	0.109	1.496
0.109	0.981							
111G	1.963	1.453	1.945	-0.228	1.476	1.854	-0.506	1.963
-0.506	1.137							
112T	1.710	1.639	2.197	-0.904	1.713	1.873	0.836	2.197
-0.904	1.295							
113R	1.938	1.639	2.029	-1.552	1.494	1.253	0.569	2.029
-1.552	1.053							
114E	1.875	1.401	2.262	-1.822	1.813	1.858	0.527	2.262
-1.822	1.131							
115Y	1.843	0.622	2.468	-1.766	2.014	1.878	0.568	2.468

-1.766	1.090							
116G	2.008	1.860	2.599	-1.767	2.224	2.458	0.501	2.599
-1.767	1.412							
117R	1.160	1.137	2.085	-1.683	1.759	1.838	0.936	2.085
-1.683	1.033							
118T	1.028	0.119	2.206	-1.775	2.032	1.833	1.028	2.206
-1.775	0.924							
119E	0.914	0.255	1.832	-1.979	1.786	1.816	1.284	1.832
-1.979	0.844							
120L	-0.028	0.307	1.758	-2.259	1.841	1.821	1.719	1.841
-2.259	0.737							
121K	0.067	1.343	1.318	-2.361	1.321	1.196	1.720	1.720
-2.361	0.658							
122V	0.098	0.307	1.113	-2.390	1.121	1.176	1.680	1.680
-2.390	0.444							
123L	-0.035	0.493	1.234	-2.251	1.394	1.171	1.771	1.771
-2.251	0.540							
124G	-0.035	1.553	1.234	-2.162	1.394	1.171	1.771	1.771
-2.162	0.704							
125G	-0.262	1.465	0.945	-1.749	0.929	1.197	1.973	1.973
-1.749	0.643							
126K	0.383	0.634	1.216	-1.078	1.093	1.215	1.545	1.545
-1.078	0.715							
127L	1.597	0.161	1.571	0.154	1.403	1.699	1.101	1.699
0.154	1.098							
128H	0.655	0.940	1.496	1.166	1.458	1.704	1.535	1.704
0.655	1.279							
129S	0.427	0.754	1.748	1.758	1.777	1.723	1.755	1.777
0.427	1.420							
130D	0.560	0.389	1.627	1.336	1.504	1.728	1.664	1.728
0.389	1.258							
131L	0.907	0.209	1.589	0.503	1.485	1.724	1.817	1.817
0.209	1.177							
132P	1.154	0.317	1.758	-0.511	1.686	1.147	1.713	1.758
-0.511	1.038							
133E	0.876	-0.544	1.851	-0.907	1.804	1.146	1.773	1.851
-0.907	0.857							
134V	0.010	-1.234	1.459	-1.068	1.476	0.658	2.371	2.371
-1.234	0.525							
135Q	-0.041	-0.282	1.561	-0.902	1.485	0.678	1.958	1.958
-0.902	0.637							
136P	-0.439	-0.683	1.309	-1.133	1.257	0.676	1.683	1.683
-1.133	0.382							
137V	-0.521	-0.414	1.132	-1.273	1.048	0.097	1.869	1.869
-1.273	0.277							
138W	-0.155	0.221	1.412	-1.101	1.230	0.715	1.548	1.548
-1.101	0.553							
139M	-0.174	0.724	1.075	-0.504	0.811	0.673	1.385	1.385
-0.504	0.570							
140S	0.326	0.742	1.103	0.573	0.856	1.143	1.156	1.156
0.326	0.843							
141H	0.692	0.377	1.225	1.242	0.866	1.141	-0.443	1.242
-0.443	0.729							
142G	1.091	0.287	1.085	1.191	0.838	1.117	0.124	1.191
0.124	0.819							
143D	1.685	-0.340	1.290	0.582	0.948	1.120	0.220	1.685
-0.340	0.786							
144A	1.407	-0.520	1.141	-0.262	0.793	1.100	-0.950	1.407
-0.950	0.387							

145V	1.407	0.019	0.982	-0.992	0.619	0.480	-2.228	1.407
-2.228	0.041							
146T	1.179	0.742	1.234	-1.127	0.938	0.499	-2.008	1.234
-2.008	0.208							
147A	1.179	0.077	1.234	-0.987	0.938	0.499	-2.008	1.234
-2.008	0.133							
148A	1.407	0.616	1.225	-0.513	0.893	0.499	-0.998	1.407
-0.998	0.447							
149P	1.059	0.519	1.281	0.083	0.856	0.502	-1.335	1.281
-1.335	0.424							
150D	1.363	0.065	1.356	0.525	1.020	0.971	-1.385	1.363
-1.385	0.559							
151G	0.996	-0.474	1.234	0.631	1.011	0.972	0.214	1.234
-0.474	0.655							
152F	0.629	-0.246	1.113	0.463	1.002	0.974	1.813	1.813
-0.246	0.821							
153D	0.629	0.784	0.870	-0.031	0.729	0.955	0.583	0.955
-0.031	0.645							
154V	0.408	0.245	0.748	-0.492	0.565	0.486	0.751	0.751
-0.492	0.387							
155V	0.459	0.968	0.907	-0.571	0.765	0.506	0.911	0.968
-0.571	0.564							
156A	1.173	1.064	0.973	-0.306	0.811	0.502	-0.350	1.173
-0.350	0.552							
157S	0.901	1.423	0.692	0.016	0.446	0.013	-0.341	1.423
-0.341	0.450							
158S	1.268	0.471	0.814	0.061	0.455	0.012	-1.940	1.268
-1.940	0.163							
159A	1.634	-0.384	1.178	-0.291	0.738	0.029	-2.309	1.634
-2.309	0.085							
160G	1.268	-0.384	1.057	-0.805	0.729	0.031	-0.710	1.268
-0.805	0.169							
161A	0.990	-1.186	0.907	-1.126	0.574	0.010	-1.880	0.990
-1.880	-0.244							
162P	0.711	-0.611	0.758	-1.340	0.419	-0.010	-3.050	0.758
-3.050	-0.446							
163V	-0.003	-0.969	0.692	-1.365	0.373	-0.005	-1.788	0.692
-1.788	-0.438							
164A	0.130	-1.047	1.029	-1.548	0.784	0.594	-1.815	1.029
-1.815	-0.268							
165A	0.130	-0.508	1.029	-1.580	0.784	0.594	-1.815	1.029
-1.815	-0.195							
166F	-0.585	0.305	0.720	-1.583	0.465	0.579	-1.784	0.720
-1.784	-0.269							
167E	0.281	1.293	1.113	-1.212	0.793	1.067	-2.381	1.293
-2.381	0.136							
168A	0.414	0.513	1.543	-0.882	1.267	1.691	-1.372	1.691
-1.372	0.453							
169F	0.547	0.513	1.973	-0.540	1.741	2.316	-0.363	2.316
-0.540	0.884							
170D	0.547	1.315	1.954	-0.682	1.795	2.317	-0.179	2.317
-0.682	1.010							
171R	0.187	0.680	1.627	-1.171	1.431	1.718	-1.163	1.718
-1.171	0.473							
172R	0.414	0.357	1.617	-1.813	1.385	1.718	-0.153	1.718
-1.813	0.504							
173L	0.762	-0.863	1.561	-2.186	1.422	1.715	0.185	1.715
-2.186	0.371							
174A	0.509	-0.568	1.617	-2.195	1.476	1.269	0.357	1.617



-2.195	0.352							
175G	0.123	-0.210	1.440	-1.846	1.239	0.663	0.690	1.440
-1.846	0.300							
176V	-0.009	-0.262	1.169	-1.119	0.938	0.658	0.958	1.169
-1.119	0.333							
177Q	0.705	-0.262	1.496	-0.293	1.203	0.672	0.743	1.496
-0.293	0.609							
178Y	1.065	-0.867	1.823	0.512	1.567	1.272	1.727	1.823
-0.867	1.014							
179H	0.471	-0.370	1.711	0.781	1.604	1.273	2.316	2.316
-0.370	1.112							
180P	0.440	0.031	1.823	0.293	1.658	1.289	1.672	1.823
0.031	1.029							
181E	0.193	0.031	1.655	-0.369	1.458	1.866	1.776	1.866
-0.369	0.944							
182V	0.642	-0.454	1.599	-0.714	1.376	1.867	1.484	1.867
-0.714	0.829							
183M	0.642	0.269	1.683	-0.365	1.476	1.266	1.437	1.683
-0.365	0.915							
184H	0.642	0.874	1.599	0.624	1.376	1.867	1.484	1.867
0.624	1.209							
185T	0.509	1.275	1.262	1.425	0.966	1.267	1.511	1.511
0.509	1.174							
186P	1.122	0.688	1.711	1.707	1.349	1.308	1.086	1.711
0.688	1.282							
187H	1.767	0.125	2.047	1.520	1.677	1.333	1.304	2.047
0.125	1.396							
188G	1.401	0.890	1.767	0.739	1.494	0.715	1.625	1.767
0.715	1.233							
189Q	0.490	1.076	1.487	-0.075	1.349	0.700	2.020	2.020
-0.075	1.007							
190Q	0.768	0.411	1.393	-0.575	1.230	0.702	1.960	1.960
-0.575	0.841							
191V	0.901	-0.284	1.664	-1.046	1.531	0.706	1.691	1.691
-1.046	0.738							
192L	-0.041	-0.098	1.608	-0.913	1.531	0.711	1.942	1.942
-0.913	0.677							
193S	-1.002	0.646	1.197	-0.930	1.166	0.674	2.214	2.214
-1.002	0.566							
194R	-1.249	-0.384	1.029	-0.602	0.966	1.251	2.318	2.318
-1.249	0.476							
195F	-0.382	-1.198	1.421	-0.130	1.294	1.738	1.720	1.738
-1.198	0.638							
196L	-0.382	-0.396	1.440	0.711	1.239	1.737	1.536	1.737
-0.396	0.841							
197H	-0.661	-0.396	1.290	1.201	1.084	1.717	0.366	1.717
-0.661	0.657							
198D	-0.566	0.141	0.851	1.298	0.565	1.092	0.368	1.298
-0.566	0.536							
199F	-0.566	-0.398	0.832	0.443	0.619	1.094	0.551	1.094
-0.566	0.368							
200A	0.376	0.267	0.907	-0.541	0.565	1.088	0.117	1.088
-0.541	0.397							
201G	0.376	-0.236	0.748	-1.503	0.392	0.468	-1.161	0.748
-1.503	-0.131							
202L	0.123	-0.372	0.804	-1.824	0.446	0.022	-0.988	0.804
-1.824	-0.256							
203G	0.073	0.191	0.889	-1.847	0.510	0.043	-1.217	0.889
-1.847	-0.194							

204A	0.269	-0.436	1.085	-1.573	0.665	0.063	-0.166	1.085
-1.573	-0.013							
205Q	0.041	0.173	1.337	-1.250	0.984	0.082	0.053	1.337
-1.250	0.203							
206W	0.756	-0.643	1.421	-0.915	0.975	0.076	-1.392	1.421
-1.392	0.040							
207T	0.838	-0.140	1.730	-0.278	1.330	0.117	-1.505	1.730
-1.505	0.299							
208P	0.199	-0.021	1.589	0.123	1.312	0.119	-0.173	1.589
-0.173	0.450							
209A	-0.047	-0.380	1.262	0.362	0.938	0.076	-1.347	1.262
-1.347	0.124							
210N	1.028	-0.585	1.543	0.547	1.230	0.092	-1.482	1.543
-1.482	0.339							
211I	0.832	-1.518	1.346	0.428	1.075	0.072	-2.533	1.346
-2.533	-0.043							
212A	0.117	-0.619	1.019	0.278	0.811	0.058	-2.318	1.019
-2.318	-0.093							
213N	-0.521	-0.128	0.879	0.018	0.793	0.060	-0.986	0.879
-0.986	0.016							
214A	-0.471	-0.833	0.907	-0.792	0.847	0.619	-0.899	0.907
-0.899	-0.089							
215L	0.414	-0.019	1.375	-1.521	1.239	0.660	-1.058	1.375
-1.521	0.156							
216I	0.048	0.676	1.253	-2.018	1.230	0.661	0.541	1.253
-2.018	0.342							
217E	-0.129	1.491	1.384	-2.269	1.394	1.245	0.653	1.491
-2.269	0.538							
218Q	0.067	0.592	1.580	-1.942	1.549	1.265	1.704	1.704
-1.942	0.688							
219V	1.028	0.728	1.991	-1.650	1.914	1.302	1.432	1.991
-1.650	0.964							
220R	1.028	1.363	1.991	-1.489	1.914	1.302	1.432	1.991
-1.489	1.077							
221T	0.895	1.177	1.655	-1.395	1.504	0.703	1.459	1.655
-1.395	0.857							
222Q	1.148	0.776	1.599	-1.250	1.449	1.149	1.287	1.599
-1.250	0.880							
223I	1.742	0.285	1.711	-1.083	1.412	1.148	0.698	1.742
-1.083	0.845							
224G	1.609	0.285	1.440	-0.367	1.112	1.143	0.966	1.609
-0.367	0.884							
225D	1.413	-0.306	1.244	0.223	0.957	1.123	-0.084	1.413
-0.306	0.653							
226G	0.528	-0.218	0.776	0.582	0.565	1.082	0.074	1.082
-0.218	0.484							
227H	1.122	-1.049	0.702	0.474	0.492	1.098	0.375	1.122
-1.049	0.459							
228A	1.122	-0.284	0.702	-0.092	0.492	1.098	0.375	1.122
-0.284	0.487							
229I	-0.092	0.343	0.346	-0.820	0.182	0.615	0.819	0.819
-0.820	0.199							
230C	-0.041	1.295	0.505	-0.891	0.382	0.635	0.978	1.295
-0.891	0.409							
231G	0.187	1.163	0.337	-0.958	0.164	0.015	0.711	1.163
-0.958	0.231							
232L	0.414	1.074	0.328	-0.714	0.118	0.015	1.721	1.721
-0.714	0.422							
233S	0.686	2.134	0.346	-0.658	0.127	0.015	1.988	2.134

-0.658	0.663							
234G	1.230	1.279	0.832	-0.647	0.537	0.486	1.357	1.357
-0.647	0.725							
235G	1.280	0.556	0.991	-0.448	0.738	0.506	1.517	1.517
-0.448	0.734							
236V	1.995	-0.072	1.075	-0.006	0.729	0.500	0.072	1.995
-0.072	0.613							
237D	1.350	0.025	0.804	0.247	0.565	0.482	0.501	1.350
0.025	0.568							
238S	1.122	-0.514	0.814	0.157	0.610	0.482	-0.510	1.122
-0.514	0.309							
239A	0.895	-1.574	0.823	-0.520	0.656	0.482	-1.520	0.895
-1.574	-0.108							
240V	1.261	-1.670	0.945	-1.308	0.665	0.480	-3.119	1.261
-3.119	-0.392							
241A	0.048	-1.083	0.589	-1.954	0.355	-0.003	-2.675	0.589
-2.675	-0.675							
242A	-0.597	-0.270	0.318	-2.249	0.191	-0.022	-2.246	0.318
-2.249	-0.696							
243A	-0.351	-0.270	0.646	-2.178	0.565	0.021	-1.073	0.646
-2.178	-0.377							
244L	0.149	-0.595	1.197	-2.103	1.048	0.644	-1.662	1.197
-2.103	-0.189							
245V	0.149	0.237	1.197	-1.961	1.048	0.644	-1.662	1.197
-1.961	-0.050							
246Q	-0.490	0.872	1.057	-2.010	1.030	0.646	-0.331	1.057
-2.010	0.111							
247R	-0.262	1.195	1.047	-2.144	0.984	0.646	0.680	1.195
-2.144	0.306							
248A	0.952	0.177	1.403	-2.072	1.294	1.129	0.236	1.403
-2.072	0.445							
249I	1.451	0.668	1.954	-1.818	1.777	1.752	-0.354	1.954
-1.818	0.776							
250G	0.490	1.028	1.543	-1.397	1.412	1.715	-0.082	1.715
-1.397	0.673							
251D	0.553	0.305	1.309	-1.014	1.093	1.111	-0.040	1.309
-1.014	0.474							
252R	0.509	-0.408	1.094	-0.843	1.002	1.128	1.592	1.592
-0.843	0.582							
253L	0.781	-1.318	1.113	-0.814	1.011	1.128	1.859	1.859
-1.318	0.537							
254T	-0.161	-0.574	1.057	-0.605	1.011	1.132	2.110	2.110
-0.605	0.567							
255C	-1.027	-0.975	0.664	-0.637	0.683	0.645	2.708	2.708
-1.027	0.294							
256V	-0.661	-0.384	0.505	-0.404	0.528	0.509	2.699	2.699
-0.661	0.399							
257F	0.054	-0.492	0.748	-0.010	0.692	1.124	2.532	2.532
-0.492	0.664							
258V	0.085	-0.522	0.543	0.562	0.492	1.104	2.491	2.491
-0.522	0.679							
259D	-0.585	0.387	0.674	1.032	0.592	1.091	2.304	2.304
-0.585	0.785							
260H	-0.932	-0.152	0.711	0.956	0.610	1.095	2.150	2.150
-0.932	0.634							
261G	-0.085	0.385	1.206	0.005	1.130	1.716	1.898	1.898
-0.085	0.894							
262L	0.281	0.333	1.328	-1.150	1.139	1.714	0.299	1.714
-1.150	0.564							

263L	0.010	1.351	1.047	-2.042	0.774	1.225	0.309	1.351
-2.042	0.382							
264R	0.370	1.555	1.216	-2.442	0.966	1.205	0.015	1.555
-2.442	0.412							
265A	0.275	1.233	1.655	-2.386	1.485	1.830	0.014	1.830
-2.386	0.586							
266G	0.990	1.137	1.739	-2.317	1.476	1.824	-1.431	1.824
-2.317	0.488							
267E	1.951	1.000	2.150	-2.223	1.841	1.861	-1.703	2.150
-2.223	0.697							
268R	1.451	1.239	1.599	-2.114	1.358	1.238	-1.113	1.599
-2.114	0.522							
269A	1.698	0.964	1.926	-1.813	1.731	1.280	0.060	1.926
-1.813	0.835							
270Q	1.603	0.790	2.365	-1.603	2.251	1.905	0.059	2.365
-1.603	1.053							
271V	1.742	0.203	2.309	-1.173	2.205	1.794	0.076	2.309
-1.173	1.022							
272Q	0.895	0.299	1.814	-0.824	1.686	1.174	0.328	1.814
-0.824	0.767							
273R	0.528	-0.192	1.692	-0.419	1.677	1.176	1.927	1.927
-0.419	0.913							
274D	0.281	-0.514	1.365	-0.309	1.303	1.133	0.754	1.365
-0.514	0.573							
275F	0.648	-0.426	1.487	-0.487	1.312	1.132	-0.845	1.487
-0.845	0.403							
276V	0.598	-0.252	1.356	-0.976	1.093	1.109	-0.968	1.356
-0.976	0.280							
277A	0.692	0.453	0.917	-1.299	0.574	0.484	-0.966	0.917
-1.299	0.122							
278A	0.193	0.249	0.646	-1.494	0.255	-0.004	-1.968	0.646
-1.968	-0.303							
279T	1.217	0.153	1.010	-1.010	0.610	0.032	-2.332	1.217
-2.332	-0.046							
280G	0.869	0.153	1.047	-0.528	0.629	0.036	-2.486	1.047
-2.486	-0.040							
281A	0.503	-0.570	0.926	-0.040	0.619	0.037	-0.887	0.926
-0.887	0.084							
282N	0.699	-0.032	1.122	0.120	0.774	0.057	0.164	1.122
-0.032	0.415							
283L	0.136	-0.641	0.804	-0.198	0.610	0.039	0.712	0.804
-0.641	0.209							
284V	0.408	-0.436	1.085	-0.458	0.975	0.528	0.703	1.085
-0.458	0.401							
285T	0.408	0.235	1.085	-0.542	0.975	0.528	0.703	1.085
-0.542	0.485							
286V	0.098	0.235	0.786	-0.571	0.665	0.487	-0.194	0.786
-0.571	0.215							
287D	1.173	0.157	1.197	-0.583	1.020	1.081	-0.655	1.197
-0.655	0.484							
288A	1.736	-0.587	1.515	-0.800	1.185	1.100	-1.203	1.736
-1.203	0.421							
289A	0.825	-0.011	1.253	-1.158	0.984	1.084	-0.993	1.253
-1.158	0.283							
290E	0.477	-0.011	1.290	-1.196	1.002	1.088	-1.147	1.290
-1.196	0.215							
291T	0.338	-0.791	1.346	-1.263	1.048	1.199	-1.164	1.346
-1.263	0.102							
292F	0.338	-0.426	1.346	-1.305	1.048	1.199	-1.164	1.346

-1.305	0.148							
293L	-0.376	0.375	1.262	-1.638	1.057	1.204	0.281	1.262
-1.638	0.309							
294E	-0.458	0.483	1.085	-1.736	0.847	0.624	0.467	1.085
-1.736	0.188							
295A	-0.427	0.764	0.879	-1.656	0.647	0.604	0.427	0.879
-1.656	0.177							
296L	-0.079	0.764	0.823	-1.280	0.683	0.602	0.764	0.823
-1.280	0.325							
297S	0.914	1.327	1.057	-0.751	0.829	0.617	0.489	1.327
-0.751	0.640							
298G	0.553	1.046	0.730	-0.522	0.465	0.017	-0.495	1.046
-0.522	0.256							
299V	0.553	1.046	0.973	-0.333	0.738	0.036	0.735	1.046
-0.333	0.535							
300S	1.628	1.974	1.384	-0.314	1.093	0.630	0.274	1.974
-0.314	0.953							
301A	1.578	1.932	1.225	-0.471	0.893	0.610	0.114	1.932
-0.471	0.840							
302P	1.578	2.764	1.683	-0.834	1.576	1.205	0.179	2.764
-0.834	1.164							
303E	2.077	2.080	2.234	-1.298	2.060	1.828	-0.410	2.234
-1.298	1.224							
304G	2.026	1.181	2.533	-1.957	2.543	2.402	-0.505	2.543
-1.957	1.175							
305K	1.388	1.181	2.393	-2.384	2.524	2.404	0.827	2.524
-2.384	1.190							
306R	0.749	1.163	2.010	-2.852	2.233	2.387	0.928	2.387
-2.852	0.945							
307K	0.617	0.840	1.674	-3.038	1.823	1.787	0.955	1.823
-3.038	0.665							
308I	0.522	-0.166	2.113	-3.147	2.342	2.412	0.954	2.412
-3.147	0.718							
309I	0.541	-0.166	1.991	-2.901	2.078	1.860	1.052	2.078
-2.901	0.636							
310G	-0.307	0.972	1.496	-2.414	1.558	1.239	1.304	1.558
-2.414	0.550							
311R	-1.173	0.345	0.907	-1.937	0.902	0.647	1.561	1.561
-1.937	0.179							
312Q	-0.401	-0.643	1.477	-1.651	1.394	1.269	1.238	1.477
-1.651	0.383							
313F	0.237	-0.558	1.617	-1.720	1.412	1.268	-0.094	1.617
-1.720	0.309							
314I	-0.705	0.243	1.561	-1.955	1.412	1.272	0.157	1.561
-1.955	0.284							
315R	-0.477	0.568	1.459	-2.082	1.303	1.247	0.132	1.459
-2.082	0.307							
316A	-0.496	-0.342	1.122	-1.962	0.884	1.204	-0.031	1.204
-1.962	0.054							
317F	0.218	0.471	1.188	-1.819	0.929	1.200	-1.292	1.200
-1.819	0.128							
318E	0.490	1.185	1.206	-1.712	0.938	1.200	-1.025	1.206
-1.712	0.326							
319G	0.490	0.513	1.206	-1.884	0.938	1.200	-1.025	1.206
-1.884	0.206							
320A	0.990	-0.318	1.477	-1.779	1.257	1.689	-0.024	1.689
-1.779	0.470							
321V	1.337	0.221	1.421	-1.643	1.294	1.686	0.313	1.686
-1.643	0.661							

322R	0.263	0.944	1.010	-1.233	0.938	1.092	0.775	1.092
-1.233	0.541							
323D	0.534	0.962	1.290	-0.783	1.303	1.581	0.765	1.581
-0.783	0.808							
324V	0.762	0.914	1.281	-0.540	1.257	1.581	1.776	1.776
-0.540	1.004							
325L	1.356	1.010	1.851	-0.493	1.905	2.174	1.252	2.174
-0.493	1.294							
326D	1.420	1.790	1.617	-0.466	1.586	1.569	1.294	1.790
-0.466	1.258							
327G	0.920	1.076	1.346	-0.780	1.267	1.080	0.293	1.346
-0.780	0.743							
328K	1.647	0.245	1.795	-1.072	1.640	1.678	-0.323	1.795
-1.072	0.802							
329T	1.647	-0.683	1.814	-1.257	1.586	1.677	-0.506	1.814
-1.257	0.611							
330A	0.433	-0.683	1.459	-1.530	1.276	1.194	-0.062	1.459
-1.530	0.298							
331E	-0.161	-0.056	1.346	-1.584	1.312	1.195	0.526	1.346
-1.584	0.368							
332F	-0.142	-0.140	1.225	-1.563	1.048	0.643	0.624	1.225
-1.563	0.242							
333L	-0.111	-0.170	1.019	-1.600	0.847	0.623	0.584	1.019
-1.600	0.170							
334V	0.085	-0.372	1.216	-1.413	1.002	0.643	1.635	1.635
-1.413	0.399							
335Q	-0.989	0.083	0.804	-1.249	0.647	0.049	2.096	2.096
-1.249	0.206							
336G	-0.528	0.131	1.122	-1.138	0.929	0.064	2.177	2.177
-1.138	0.394							
337T	0.187	-0.593	1.449	-1.015	1.194	0.077	1.962	1.962
-1.015	0.466							
338L	1.053	-1.180	1.842	-0.672	1.522	0.565	1.364	1.842
-1.180	0.642							
339Y	0.440	-0.400	1.393	-0.334	1.139	0.524	1.790	1.790
-0.400	0.650							
340P	-0.155	0.862	1.281	0.065	1.175	0.526	2.378	2.378
-0.155	0.876							
341D	0.010	1.131	1.412	-0.088	1.385	1.105	2.311	2.311
-0.088	1.038							
342V	1.002	1.219	1.646	-0.367	1.531	1.120	2.036	2.036
-0.367	1.169							
343V	1.483	1.942	1.384	-0.805	1.248	1.101	1.704	1.942
-0.805	1.151							
344E	1.710	2.894	1.132	-0.856	0.929	1.082	1.484	2.894
-0.856	1.196							
345S	1.438	2.946	0.851	-0.863	0.565	0.593	1.494	2.946
-0.863	1.003							
346G	2.083	2.581	1.122	-0.620	0.729	0.611	1.065	2.581
-0.620	1.082							
347G	2.678	1.954	1.234	-0.624	0.692	0.610	0.476	2.678
-0.624	1.003							
348G	2.513	1.936	1.103	-0.382	0.483	0.030	0.543	2.513
-0.382	0.890							
349S	2.235	0.984	0.954	-0.385	0.328	0.010	-0.627	2.235
-0.627	0.500							
350G	2.317	0.960	1.262	0.040	0.683	0.050	-0.740	2.317
-0.740	0.653							
351T	1.451	1.189	1.132	0.083	0.711	0.052	-0.418	1.451



381D	0.275	0.461	1.851	-0.832	1.950	2.289	1.486	2.289
-0.832	1.069							
382E	0.990	0.550	1.935	-1.149	1.941	2.283	0.040	2.283
-1.149	0.941							
383V	1.337	0.788	1.879	-1.785	1.977	2.281	0.378	2.281
-1.785	0.979							
384R	1.337	1.459	1.421	-2.091	1.294	1.686	0.313	1.686
-2.091	0.774							
385A	0.971	0.441	1.580	-2.357	1.449	1.822	0.321	1.822
-2.357	0.604							
386V	0.971	1.068	1.580	-2.288	1.449	1.822	0.321	1.822
-2.288	0.703							
387G	0.623	0.960	1.617	-2.324	1.467	1.826	0.168	1.826
-2.324	0.620							
388R	0.718	0.692	1.178	-2.344	0.948	1.201	0.169	1.201
-2.344	0.366							
389E	0.003	0.453	1.094	-2.402	0.957	1.206	1.614	1.614
-2.402	0.418							
390L	0.370	0.453	1.459	-2.176	1.239	1.224	1.245	1.459
-2.176	0.545							
391G	0.503	0.333	1.795	-1.939	1.649	1.823	1.219	1.823
-1.939	0.769							
392L	0.730	-0.390	1.692	-1.617	1.540	1.798	1.193	1.798
-1.617	0.707							
393P	-0.269	-0.186	1.225	-1.630	1.157	1.201	1.541	1.541
-1.630	0.434							
394E	0.079	0.269	1.188	-1.852	1.139	1.197	1.695	1.695
-1.852	0.531							
395E	-0.148	0.185	1.197	-2.287	1.185	1.197	0.684	1.197
-2.287	0.287							
396I	0.699	-0.032	1.711	-2.546	1.649	1.816	0.249	1.816
-2.546	0.507							
397V	0.945	0.119	1.795	-2.570	1.750	1.839	0.192	1.839
-2.570	0.581							
398A	0.585	0.574	1.711	-2.146	1.658	1.259	0.438	1.711
-2.146	0.583							
399R	-0.490	1.201	1.318	-1.526	1.248	0.663	0.716	1.318
-1.526	0.447							
400Q	0.149	0.746	1.702	-0.727	1.540	0.681	0.614	1.702
-0.727	0.672							
401P	0.743	0.882	1.814	-0.175	1.504	0.679	0.025	1.814
-0.175	0.782							
402F	0.743	0.319	2.057	0.164	1.777	0.698	1.256	2.057
0.164	1.002							
403P	0.838	1.121	1.617	0.116	1.257	0.073	1.257	1.617
0.073	0.897							
404G	-0.123	0.437	1.206	-0.198	0.893	0.036	1.528	1.528
-0.198	0.540							
405P	0.104	0.624	0.954	-0.670	0.574	0.017	1.309	1.309
-0.670	0.416							
406G	0.180	-0.060	0.879	-1.239	0.601	0.015	1.379	1.379
-1.239	0.251							
407L	0.313	-0.783	1.066	-1.877	0.802	0.621	1.158	1.158
-1.877	0.186							
408G	-0.553	0.049	0.935	-2.425	0.829	0.623	1.480	1.480
-2.425	0.134							
409I	-0.920	-0.003	0.571	-2.854	0.547	0.605	1.849	1.849
-2.854	-0.029							
410R	-0.920	0.225	0.571	-2.994	0.547	0.605	1.849	1.849



-2.994	-0.017							
411I	0.155	-0.098	0.982	-2.872	0.902	1.199	1.387	1.387
-2.872	0.237							
412V	-0.439	0.227	0.870	-2.645	0.938	1.201	1.976	1.976
-2.645	0.304							
413G	0.395	1.155	1.206	-2.232	1.112	1.219	1.695	1.695
-2.232	0.650							
414E	0.263	1.341	0.776	-1.948	0.638	0.594	0.686	1.341
-1.948	0.336							
415V	1.129	0.562	1.365	-1.716	1.294	1.187	0.429	1.365
-1.716	0.607							
416T	1.628	1.197	1.917	-1.726	1.777	1.810	-0.161	1.917
-1.726	0.920							
417A	0.686	1.197	1.842	-1.942	1.832	1.816	0.274	1.842
-1.942	0.815							
418K	0.825	0.992	1.786	-1.952	1.786	1.705	0.291	1.786
-1.952	0.776							
419R	1.388	0.974	2.103	-1.658	1.950	1.723	-0.257	2.103
-1.658	0.889							
420L	0.477	0.251	1.823	-1.109	1.804	1.709	0.138	1.823
-1.109	0.728							
421D	0.610	0.455	2.253	-0.666	2.278	2.333	1.147	2.333
-0.666	1.202							
422T	0.383	0.455	1.963	-0.320	1.813	2.359	1.349	2.359
-0.320	1.143							
423L	0.250	0.820	1.533	-0.396	1.339	1.734	0.340	1.734
-0.396	0.803							
424R	1.464	0.700	1.889	0.014	1.649	2.218	-0.104	2.218
-0.104	1.118							
425H	1.242	-0.210	1.767	0.498	1.485	1.749	0.065	1.767
-0.210	0.942							
426A	0.408	0.513	1.431	0.930	1.312	1.731	0.346	1.731
0.346	0.953							
427D	0.756	1.089	1.393	0.836	1.294	1.727	0.499	1.727
0.499	1.085							
428S	0.756	1.125	1.393	0.164	1.294	1.727	0.499	1.727
0.164	0.994							
429I	1.116	0.065	1.561	-1.025	1.485	1.706	0.206	1.706
-1.025	0.731							
430V	1.476	0.880	1.889	-1.865	1.850	2.306	1.190	2.306
-1.865	1.104							
431R	0.263	0.976	1.533	-2.434	1.540	1.822	1.634	1.822
-2.434	0.762							
432E	0.180	0.163	1.580	-2.490	1.540	1.822	1.514	1.822
-2.490	0.616							
433E	0.819	0.215	1.720	-2.208	1.558	1.821	0.183	1.821
-2.208	0.587							
434L	1.186	-0.564	1.842	-1.923	1.567	1.819	-1.416	1.842
-1.923	0.359							
435T	1.280	0.179	1.403	-1.711	1.048	1.194	-1.415	1.403
-1.711	0.283							
436A	0.206	0.297	0.991	-1.705	0.692	0.600	-0.954	0.991
-1.705	0.018							
437A	0.345	0.788	0.935	-1.549	0.647	0.490	-0.936	0.935
-1.549	0.103							
438G	1.369	0.463	1.318	-0.870	0.948	0.525	-1.484	1.369
-1.484	0.324							
439L	1.420	-0.667	1.449	0.128	1.166	0.547	-1.362	1.449
-1.362	0.383							

440D	0.781	0.029	1.309	1.075	1.148	0.549	-0.030	1.309
-0.030	0.694							
441N	0.016	-0.474	1.328	1.231	1.166	0.574	1.002	1.328
-0.474	0.692							
442Q	0.035	-0.725	1.664	0.473	1.586	0.617	1.165	1.664
-0.725	0.688							
443I	0.705	-1.312	1.533	-0.438	1.485	0.629	1.353	1.533
-1.312	0.565							
444W	0.206	-1.083	1.505	-0.845	1.440	0.159	1.582	1.582
-1.083	0.423							
445Q	-0.471	-0.785	1.085	-0.692	1.121	0.120	2.283	2.283
-0.785	0.380							
446C	-1.084	-1.480	0.636	-0.331	0.738	0.079	2.709	2.709
-1.480	0.181							
447P	-1.160	-1.516	0.692	-0.447	0.765	0.083	2.822	2.822
-1.516	0.177							
448V	-1.109	-1.336	0.589	-1.057	0.756	0.063	3.235	3.235
-1.336	0.163							
449V	-1.356	-1.336	0.262	-1.771	0.382	0.021	2.061	2.061
-1.771	-0.248							
450L	-0.812	-0.426	0.748	-1.933	0.793	0.492	1.430	1.430
-1.933	0.042							
451L	-1.179	0.634	0.384	-1.740	0.510	0.474	1.799	1.799
-1.740	0.126							
452A	-0.680	0.742	0.935	-1.236	0.993	1.097	1.209	1.209
-1.236	0.437							
453D	-0.035	1.369	1.206	-0.770	1.157	1.116	0.780	1.369
-0.770	0.689							
454V	0.313	0.734	1.169	-0.652	1.139	1.112	0.934	1.169
-0.652	0.678							
455R	1.255	1.321	1.244	-0.685	1.084	1.107	0.499	1.321
-0.685	0.832							
456S	0.888	1.135	1.122	-0.831	1.075	1.108	2.098	2.098
-0.831	0.942							
457V	0.636	0.818	1.178	-1.064	1.130	0.662	2.271	2.271
-1.064	0.804							
458G	1.230	1.541	1.290	-1.252	1.093	0.660	1.682	1.682
-1.252	0.892							
459V	1.597	1.728	1.132	-1.020	0.938	0.524	1.674	1.728
-1.020	0.939							
460Q	1.546	2.315	0.973	-0.815	0.738	0.504	1.514	2.315
-0.815	0.968							
461G	2.045	1.417	1.524	-0.412	1.221	1.127	0.925	2.045
-0.412	1.121							
462D	2.014	1.417	1.730	-0.325	1.422	1.147	0.965	2.014
-0.325	1.196							
463G	2.128	0.968	2.103	-0.517	1.668	1.165	0.709	2.128
-0.517	1.175							
464R	2.109	0.700	1.767	-0.879	1.248	1.123	0.546	2.109
-0.879	0.945							
465T	1.881	-0.438	1.935	-0.663	1.467	1.743	0.813	1.935
-0.663	0.962							
466Y	1.382	-1.025	1.907	-0.248	1.422	1.273	1.042	1.907
-1.025	0.822							
467G	0.515	-0.823	1.776	0.332	1.449	1.274	1.363	1.776
-0.823	0.841							
468H	0.016	-0.637	1.225	0.519	0.966	0.651	1.953	1.953
-0.637	0.670							
469P	-0.894	-0.368	0.945	-0.057	0.820	0.637	2.347	2.347

-0.894	0.490							
470I	-0.509	-0.823	1.122	-1.066	1.057	1.242	2.014	2.014
-1.066	0.434							
471V	-0.736	0.357	1.375	-1.746	1.376	1.261	2.234	2.234
-1.746	0.589							
472L	-1.103	1.309	1.094	-2.105	1.194	0.643	2.555	2.555
-2.105	0.512							
473R	-0.825	2.088	1.001	-1.632	1.075	0.644	2.495	2.495
-1.632	0.692							
474P	0.092	1.814	1.290	-0.785	1.248	0.662	2.333	2.333
-0.785	0.951							
475V	0.819	1.455	1.739	-0.061	1.622	1.260	1.718	1.739
-0.061	1.222							
476S	2.033	1.437	2.094	0.603	1.932	1.744	1.274	2.094
0.603	1.588							
477S	1.900	1.072	1.664	0.779	1.458	1.119	0.265	1.900
0.265	1.180							
478E	1.502	0.217	1.412	0.414	1.230	1.117	-0.010	1.502
-0.010	0.840							
479D	2.064	0.181	1.730	-0.103	1.394	1.136	-0.558	2.064
-0.558	0.835							
480A	1.786	-0.861	1.580	-0.821	1.239	1.116	-1.728	1.786
-1.728	0.330							
481M	2.008	-0.370	1.702	-1.089	1.403	1.584	-1.897	2.008
-1.897	0.477							
482T	0.882	0.558	1.393	-0.965	1.057	1.010	-1.849	1.393
-1.849	0.298							
483A	0.579	-0.030	1.318	-0.620	0.893	0.541	-1.799	1.318
-1.799	0.126							
484D	0.711	0.329	1.748	-0.467	1.367	1.166	-0.790	1.748
-0.790	0.581							
485W	0.743	-0.617	1.636	-0.580	1.312	1.150	-0.146	1.636
-0.617	0.500							
486T	0.547	0.461	1.683	-1.002	1.431	1.149	0.034	1.683
-1.002	0.615							
487R	0.294	-0.126	1.935	-1.167	1.668	1.168	1.376	1.935
-1.167	0.736							
488V	0.155	-1.144	1.991	-1.287	1.713	1.279	1.358	1.991
-1.287	0.581							
489P	0.553	-0.472	1.851	-1.167	1.686	1.255	1.925	1.925
-1.167	0.805							
490Y	-0.357	-0.017	1.571	-1.365	1.540	1.241	2.319	2.319
-1.365	0.704							
491E	-0.129	0.065	1.468	-1.702	1.431	1.216	2.294	2.294
-1.702	0.663							
492V	0.370	0.345	2.019	-2.110	1.914	1.839	1.704	2.019
-2.110	0.869							
493L	-0.269	0.932	1.636	-2.520	1.622	1.822	1.806	1.822
-2.520	0.718							
494E	0.263	1.950	1.533	-2.466	1.540	1.822	1.634	1.950
-2.466	0.897							
495R	0.098	1.050	1.403	-2.116	1.330	1.243	1.701	1.701
-2.116	0.673							
496I	0.598	0.728	1.954	-1.545	1.813	1.866	1.111	1.954
-1.545	0.932							
497S	0.673	1.662	1.898	-1.148	1.786	1.862	0.998	1.898
-1.148	1.104							
498T	0.509	1.381	1.767	-1.061	1.576	1.283	1.065	1.767
-1.061	0.931							

499R	0.686	0.794	1.636	-0.954	1.412	0.699	0.953	1.636
-0.954	0.747							
500I	1.685	-0.019	2.103	-0.659	1.795	1.296	0.605	2.103
-0.659	0.972							
501T	1.040	0.880	1.832	-0.148	1.631	1.278	1.034	1.832
-0.148	1.078							
502N	0.844	0.293	1.636	0.091	1.476	1.258	-0.017	1.636
-0.017	0.797							
503E	1.072	0.293	1.533	-0.282	1.367	1.233	-0.043	1.533
-0.282	0.739							
504V	1.344	0.532	1.552	-1.119	1.376	1.233	0.224	1.552
-1.119	0.734							
505A	1.457	0.532	1.655	-1.349	1.531	1.253	0.071	1.655
-1.349	0.736							
506E	1.280	0.435	1.786	-1.289	1.695	1.837	0.183	1.837
-1.289	0.847							
507V	0.553	-0.344	1.337	-0.565	1.321	1.239	0.798	1.337
-0.565	0.620							
508N	0.553	0.291	1.337	-0.330	1.321	1.239	0.798	1.337
-0.330	0.744							
509R	-0.161	-0.643	1.253	-0.651	1.330	1.245	2.243	2.243
-0.651	0.659							
510V	-0.022	-0.965	1.197	-1.095	1.285	1.134	2.260	2.260
-1.095	0.542							
511V	-0.294	-0.013	1.178	-1.355	1.276	1.134	1.993	1.993
-1.355	0.560							
512L	-0.408	0.914	1.075	-1.272	1.121	1.114	2.147	2.147
-1.272	0.670							
513D	-0.262	1.477	0.795	-0.740	0.802	0.509	2.308	2.308
-0.740	0.698							
514I	0.332	1.297	1.365	-0.428	1.449	1.102	1.784	1.784
-0.428	0.986							
515T	0.699	1.621	1.730	-0.181	1.731	1.120	1.415	1.731
-0.181	1.162							
516S	1.413	1.621	2.057	0.046	1.996	1.133	1.200	2.057
0.046	1.352							
517K	0.914	0.441	1.786	-0.040	1.677	0.644	0.199	1.786
-0.040	0.803							
518P	1.748	0.185	2.122	0.012	1.850	0.662	-0.082	2.122
-0.082	0.928							
519P	0.914	-0.677	1.786	-0.319	1.677	0.644	0.199	1.786
-0.677	0.603							
520A	0.996	-0.460	1.963	-0.850	1.886	1.224	0.013	1.963
-0.850	0.682							
521T	0.003	-0.206	1.533	-1.422	1.267	0.654	-0.030	1.533
-1.422	0.257							
522I	0.364	-0.442	1.617	-2.013	1.358	1.235	-0.276	1.617
-2.013	0.263							
523E	0.231	0.137	0.917	-2.311	1.403	1.276	-1.506	1.403
-2.311	0.021							
524W	0.098	-0.184	0.459	-2.134	1.722	1.336	-1.506	1.722
-2.134	-0.030							
525E	-0.231	0.574	-0.196	-1.754	1.886	1.376	-2.557	1.886
-2.557	-0.129							

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## 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	<sup>1</sup> VVQPADIDVPETPARPVLVDFGAQYAQLIARRVREARVFSEVIPHTASIEEIRARQPVALVLSG ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAAGLDNQIWQCPVLLADVRSVGVO
Hydrophilicity	<sup>1</sup> VVQPADIDVPETPARPVLVDFGAQYAQLIARRVREARVFSEVIPHTASIEEIRARQPVALVLSG ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAAGLDNQIWQCPVLLADVRSV <u>GVQ</u>
Flexibility	<sup>1</sup> VVQPADIDVPETPARPVLVDFGAQYAQLIARRVREARVFSEVIPHTASIEEIRARQPVALVLSG ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAAGLDNQIWQCPVLLADVRS <u>VGVO</u>
Accessibility	<sup>1</sup> VVQPADID <u>VPETPARPV</u> LVVDFGAQYAQL <u>IARRVREARV</u> FSEVIPHTASIE <u>EEIRARQPVALVLSG</u> <u>ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAAGLDNQIWQCPVLLADVRSVGVO</u>
Turns	<sup>1</sup> VVQPADIDVPETPARPVLVDFGAQYAQLIARRVREARVFSEVIPHTASIEEIRARQPVALVLSG ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAAGLDNQIWQCPVLLADVRSVGVO
Exposed Surface	<sup>1</sup> VVQPADIDVPETPARPVLVDFGAQYAQLIA <u>RRVREARV</u> FSEVIPHTASIEEIRARQPVALVLSG ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAAGLDNQIWQCPVLLADVRSVGVO
Polarity	<sup>1</sup> VVQPADIDVPETPARPVLVDFGAQYAQL <u>IARRVREARVFSEVIPHTASIEEIRARQP</u> VALVLSG <u>ARQPFPGPGLGIRIVGEVTAKRLDTRLRHADSIVREELTAA</u> GLDNQIWQCPVLLADVRSVGVO
Antigenic Propensity	<sup>1</sup> VVQPADIDVPETPA <u>RPVLVDFG</u> AQYAQLIARRVREA <u>RVFSEVIPH</u> TASIEEIRARQPVALVLSG ARQPFPGPGLG <u>IRIVGEV</u> TAKRLDTRLRHADSIVREELTAAGLDN <u>QIWQCPVLLADVRSVGVO</u>

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