Table S1: Propensity scores of amino acids at different positions on the peptide

Residue	Position 4	Position 5	Position 6	Position 7
A	0.01864	0.01592	0.00816	0.03534
C	0.01049	0.00233	0.00544	0
D	0.00777	0.00078	0.00466	0.02641
E	0.03650	0.03495	0.10330	0.10874
F	0.00155	0.03223	0.00350	0.12583
G	0.01126	0.00388	0.00311	0.02369
H	0.02913	0.26175	0.01786	0.08000
I	0.06252	0.11883	0.17243	0
K	0.04971	0.06369	0.01204	0.03689
L	0.13786	0.02524	0.12777	0.07223
M	0.04738	0.08816	0.18019	0
N	0.02447	0.0365	0.05864	0.03301
P	0	0.07184	0	0
Q	0.02718	0.01087	0.08155	0.04388
R	0.03417	0.08039	0.01087	0.03262
S	0.01709	0.00699	0.00350	0.02951
T	0.04272	0.02058	0.01476	0.02835
V	0.05204	0.05282	0.15107	0
W	0.00932	0.06990	0.03146	0
Y	0.38019	0.00233	0.00971	0.32350

Propensities were computed on a set of 2,575 heptapeptides that showed a binding affinity to Ydj1, which is comparable to that of wild-type peptide GWLYEIS. The sum of propensity values at each position is equal to 1.

Table S2: Affinity scores for peptide-binding to Ydj1 (computed using Medusa)

Name	S no.	W no.	Sequence	$\Delta G_{Complex}$	ΔG_{Ydj1}	$\Delta G_{Peptide}$	$\Delta\Delta G_{binding}$
PolyQ	1		DDQQQQQQQQQQQQQQKK				
		0	DDQQQQQ	-129.526	-128.526	4.942	-5.942
		1	DQQQQQQ	-126.920	-125.920	7.704	-8.704
		2	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		3	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		4	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		5	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		6	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		7	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		8	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		9	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		10	QQQQQQQ	-125.101	-124.101	10.968	-11.968
		11	QQQQQQK	-125.221	-124.221	9.459	-10.459
		12	QQQQQKK	-126.298	-125.298	8.363	-9.363
Rnq1	1		KKNSNNSQQGYNQSYQNGNQNSQKK				
		0	KKNSNNS	-122.115	-121.115	4.826	-5.826
		1	KNSNNSQ	-127.581	-126.581	4.812	-5.812
		2	NSNNSQQ	-123.122	-122.122	8.938	-9.938
		3	SNNSQQG	-132.409	-131.409	3.859	-4.859
		4	NNSQQGY	-127.996	-126.996	10.391	-11.391
		5	NSQQGYN	-125.889	-124.889	9.147	-10.147
		6	SQQGYNQ	-132.234	-131.234	9.732	-10.732
		7	QQGYNQS	-127.328	-126.328	10.385	-11.385
		8	QGYNQSY	-92.772	-91.772	11.674	-12.674
		9	GYNQSYQ	-127.951	-126.951	13.168	-14.168
		10	YNQSYQN	-99.384	-98.384	9.530	-10.530
		11	NQSYQNG	-133.006	-132.006	6.766	-7.766
		12	QSYQNGN	-93.614	-92.614	9.404	-10.404
		13	SYQNGNQ	-136.198	-135.198	9.280	-10.280
		14	YQNGNQN	-104.029	-103.029	8.325	-9.325
		15	QNGNQNS	-129.778	-128.778	4.655	-5.655
		16	NGNQNSQ	-121.415	-120.415	7.825	-8.825
		17	GNQNSQK	-143.237	-142.237	8.472	-9.472
		18	NQNSQKK	-123.912	-122.912	6.551	-7.551
Prion	1		ASMASSFMHSNNNQNSNNSQQGYNQ				
		0	ASMASSF	-137.253	-136.253	9.283	-10.283
		1	SMASSFM	-134.015	-133.015	10.166	-11.166
		2	MASSFMH	-123.722	-122.722	12.059	-13.059
		3	ASSFMHS	-136.750	-135.750	8.454	-9.454
		4	SSFMHSN	-117.169	-116.169	9.935	-10.935
		5	SFMHSNN	-136.205	-135.205	11.215	-12.215

6	FMHSNNN	-107.656	-106.656	11.961	-12.961
7	MHSNNNQ	-125.993	-124.993	10.048	-11.048
8	HSNNNQN	-124.541	-123.541	6.992	-7.992
9	SNNNQNS	-130.896	-129.896	4.391	-5.391
10	NNNQNSN	-123.838	-122.838	7.011	-8.011
11	NNQNSNN	-128.849	-127.849	6.637	-7.637
12	NQNSNNS	-124.937	-123.937	7.172	-8.172
13	QNSNNSQ	-130.216	-129.216	6.729	-7.729
14	NSNNSQQ	-123.122	-122.122	8.938	-9.938
15	SNNSQQG	-132.409	-131.409	3.859	-4.859
16	NNSQQGY	-127.996	-126.996	10.391	-11.391
17	NSQQGYN	-125.889	-124.889	9.147	-10.147
18	SQQGYNQ	-132.234	-131.234	9.732	-10.732
2	ASSFMHSNNNQNSNNSQQGYNQSYQ				
0	ASSFMHS	-136.750	-135.750	8.454	-9.454
1	SSFMHSN	-117.169	-116.169	9.935	-10.935
2	SFMHSNN	-136.205	-135.205	11.215	-12.215
3	FMHSNNN	-107.656	-106.656	11.961	-12.961
4	MHSNNNQ	-125.993	-124.993	10.048	-11.048
5	HSNNNQN	-124.541	-123.541	6.992	-7.992
6	SNNNQNS	-130.896	-129.896	4.391	-5.391
7	NNNQNSN	-123.838	-122.838	7.011	-8.011
8	NNQNSNN	-128.849	-127.849	6.637	-7.637
9	NQNSNNS	-124.937	-123.937	7.172	-8.172
10	QNSNNSQ	-130.216	-129.216	6.729	-7.729
11	NSNNSQQ	-123.122	-122.122	8.938	-9.938
12	SNNSQQG	-132.409	-131.409	3.859	-4.859
13	NNSQQGY	-127.996	-126.996	10.391	-11.391
14	NSQQGYN	-125.889	-124.889	9.147	-10.147
15	SQQGYNQ	-132.234	-131.234	9.732	-10.732
16	QQGYNQS	-127.328	-126.328	10.385	-11.385
17	QGYNQSY	-92.772	-91.772	11.674	-12.674
18	GYNQSYQ	-127.951	-126.951	13.168	-14.168
3	FMHSNNNQNSNNSQQGYNQSYQNGN				
0	FMHSNNN	-107.656	-106.656	11.961	-12.961
1	MHSNNNQ	-125.993	-124.993	10.048	-11.048
2	HSNNNQN	-124.541	-123.541	6.992	-7.992
3	SNNNQNS	-130.896	-129.896	4.391	-5.391
4	NNNQNSN	-123.838	-122.838	7.011	-8.011
5	NNQNSNN	-128.849	-127.849	6.637	-7.637
6	NQNSNNS	-124.937	-123.937	7.172	-8.172
7	QNSNNSQ	-130.216	-129.216	6.729	-7.729
8	NSNNSQQ	-123.122	-122.122	8.938	-9.938
9	SNNSQQG	-132.409	-131.409	3.859	-4.859
10	NNSQQGY	-127.996	-126.996	10.391	-11.391

11	NSQQGYN	-125.889	-124.889	9.147	-10.147
12	SQQGYNQ	-132.234	-131.234	9.732	-10.732
13	QQGYNQS	-127.328	-126.328	10.385	-11.385
14	QGYNQSY	-92.772	-91.772	11.674	-12.674
15	GYNQSYQ	-127.951	-126.951	13.168	-14.168
16	YNQSYQN	-99.384	-98.384	9.530	-10.530
17	NQSYQNG	-133.006	-132.006	6.766	-7.766
18	QSYQNGN	-93.614	-92.614	9.404	-10.404

4	GYNQSYQNGNQNSQGYNNQQYQGGN				
0	GYNQSYQ	-127.951	-126.951	13.168	-14.168
1	YNQSYQN	-99.384	-98.384	9.530	-10.530
2	NQSYQNG	-133.006	-132.006	6.766	-7.766
3	QSYQNGN	-93.614	-92.614	9.404	-10.404
4	SYQNGNQ	-136.198	-135.198	9.280	-10.280
5	YQNGNQN	-104.029	-103.029	8.325	-9.325
6	QNGNQNS	-129.778	-128.778	4.655	-5.655
7	NGNQNSQ	-121.415	-120.415	7.825	-8.825
8	GNQNSQG	-145.590	-144.590	6.081	-7.081
9	NQNSQGY	-121.087	-120.087	11.413	-12.413
10	QNSQGYN	-125.939	-124.939	9.774	-10.774
11	NSQGYNN	-124.869	-123.869	8.282	-9.282
12	SQGYNNQ	-134.900	-133.900	10.099	-11.099
13	QGYNNQQ	-93.153	-92.153	11.514	-12.514
14	GYNNQQY	-133.352	-132.352	11.771	-12.771
15	YNNQQYQ	-100.080	-99.080	11.831	-12.831
16	NNQQYQG	-128.796	-127.796	7.806	-8.806
17	NQQYQGG	-128.986	-127.986	6.723	-7.723
18	QQYQGGN	-91.741	-90.741	10.516	-11.516
5	QSYQNGNQNSQGYNNQQYQGGNGGY				
0	QSYQNGN	-93.614	-92.614	9.404	-10.404
1	SYQNGNQ	-136.198	-135.198	9.280	-10.280
2	YQNGNQN	-104.029	-103.029	8.325	-9.325
3	QNGNQNS	-129.778	-128.778	4.655	-5.655
4	NGNQNSQ	-121.415	-120.415	7.825	-8.825
5	GNQNSQG	-145.590	-144.590	6.081	-7.081
6	NQNSQGY	-121.087	-120.087	11.413	-12.413
7	QNSQGYN	-125.939	-124.939	9.774	-10.774
8	NSQGYNN	-124.869	-123.869	8.282	-9.282
9	SQGYNNQ	-134.900	-133.900	10.099	-11.099
10	QGYNNQQ	-93.153	-92.153	11.514	-12.514
11	GYNNQQY	-133.352	-132.352	11.771	-12.771
12	YNNQQYQ	-100.080	-99.080	11.831	-12.831
13	NNQQYQG	-128.796	-127.796	7.806	-8.806
14	NQQYQGG	-128.986	-127.986	6.723	-7.723

15	QQYQGGN	-91.741	-90.741	10.516	-11.516
16	QYQGGNG	-126.886	-125.886	9.203	-10.203
17	YQGGNGG	-105.828	-104.828	7.343	-8.343
18	QGGNGGY	-123.580	-122.580	10.805	-11.805
6	QNGNQNSQGYNNQQYQGGNGGYQQQ				
0	QNGNQNS	-129.778	-128.778	4.655	-5.655
1	NGNQNSQ	-121.415	-120.415	7.825	-8.825
2	GNQNSQG	-145.590	-144.590	6.081	-7.081
3	NQNSQGY	-121.087	-120.087	11.413	-12.413
4	QNSQGYN	-125.939	-124.939	9.774	-10.774
5	NSQGYNN	-124.869	-123.869	8.282	-9.282
6	SQGYNNQ	-134.900	-133.900	10.099	-11.099
7	QGYNNQQ	-93.153	-92.153	11.514	-12.514
8	GYNNQQY	-133.352	-132.352	11.771	-12.771
9	YNNQQYQ	-100.080	-99.080	11.831	-12.831
10	NNQQYQG	-128.796	-127.796	7.806	-8.806
11	NQQYQGG	-128.986	-127.986	6.723	-7.723
12	QQYQGGN	-91.741	-90.741	10.516	-11.516
13	QYQGGNG	-126.886	-125.886	9.203	-10.203
14	YQGGNGG	-105.828	-104.828	7.343	-8.343
15	QGGNGGY	-123.580	-122.580	10.805	-11.805
16	GGNGGYQ	-129.096	-128.096	10.688	-11.688
17	GNGGYQQ	-136.830	-135.830	9.871	-10.871
18	NGGYQQQ	-128.269	-127.269	9.454	-10.454
7	NQNSQGYNNQQYQGGNGGYQQQQGQ				
0	NQNSQGY	-121.087	-120.087	11.413	-12.413
1	QNSQGYN	-125.939	-124.939	9.774	-10.774
2	NSQGYNN	-124.869	-123.869	8.282	-9.282
3	SQGYNNQ	-134.900	-133.900	10.099	-11.099
4	QGYNNQQ	-93.153	-92.153	11.514	-12.514
5	GYNNQQY	-133.352	-132.352	11.771	-12.771
6	YNNQQYQ	-100.080	-99.080	11.831	-12.831
7	NNQQYQG	-128.796	-127.796	7.806	-8.806
8	NQQYQGG	-128.986	-127.986	6.723	-7.723
9	QQYQGGN	-91.741	-90.741	10.516	-11.516
10	QYQGGNG	-126.886	-125.886	9.203	-10.203
11	YQGGNGG	-105.828	-104.828	7.343	-8.343
12	QGGNGGY	-123.580	-122.580	10.805	-11.805
13	GGNGGYQ	-129.096	-128.096	10.688	-11.688
14	GNGGYQQ	-136.830	-135.830	9.871	-10.871
15	NGGYQQQ	-128.269	-127.269	9.454	-10.454
16	GGYQQQQ	-109.489	-108.489	9.906	-10.906
17	GYQQQQG	-143.865	-142.865	8.135	-9.135
18	YQQQQGQ	-97.305	-96.305	11.766	-12.766
8	YNNQQYQGGNGGYQQQQGQSGGAFS				

0	YNNQQYQ	-100.080	-99.080	11.831	-12.831
1	NNQQYQG	-128.796	-127.796	7.806	-8.806
2	NQQYQGG	-128.986	-127.986	6.723	-7.723
3	QQYQGGN	-91.741	-90.741	10.516	-11.516
4	QYQGGNG	-126.886	-125.886	9.203	-10.203
5	YQGGNGG	-105.828	-104.828	7.343	-8.343
6	QGGNGGY	-123.580	-122.580	10.805	-11.805
7	GGNGGYQ	-129.096	-128.096	10.688	-11.688
8	GNGGYQQ	-136.830	-135.830	9.871	-10.871
9	NGGYQQQ	-128.269	-127.269	9.454	-10.454
10	GGYQQQQ	-109.489	-108.489	9.906	-10.906
11	GYQQQQG	-143.865	-142.865	8.135	-9.135
12	YQQQQGQ	-97.305	-96.305	11.766	-12.766
13	QQQQGQS	-125.598	-124.598	10.082	-11.082
14	QQQGQSG	-127.229	-126.229	6.358	-7.358
15	QQGQSGG	-128.012	-127.012	5.419	-6.419
16	QGQSGGA	-124.443	-123.443	8.505	-9.505
17	GQSGGAF	-137.919	-136.919	9.679	-10.679
18	QSGGAFS	-125.286	-124.286	8.696	-9.696

9	QQYQGGNGGYQQQQGQSGGAFSSLA				
0	QQYQGGN	-91.741	-90.741	10.516	-11.516
1	QYQGGNG	-126.886	-125.886	9.203	-10.203
2	YQGGNGG	-105.828	-104.828	7.343	-8.343
3	QGGNGGY	-123.580	-122.580	10.805	-11.805
4	GGNGGYQ	-129.096	-128.096	10.688	-11.688
5	GNGGYQQ	-136.830	-135.830	9.871	-10.871
6	NGGYQQQ	-128.269	-127.269	9.454	-10.454
7	GGYQQQQ	-109.489	-108.489	9.906	-10.906
8	GYQQQQG	-143.865	-142.865	8.135	-9.135
9	YQQQQGQ	-97.305	-96.305	11.766	-12.766
10	QQQQGQS	-125.598	-124.598	10.082	-11.082
11	QQQGQSG	-127.229	-126.229	6.358	-7.358
12	QQGQSGG	-128.012	-127.012	5.419	-6.419
13	QGQSGGA	-124.443	-123.443	8.505	-9.505
14	GQSGGAF	-137.919	-136.919	9.679	-10.679
15	QSGGAFS	-125.286	-124.286	8.696	-9.696
16	SGGAFSS	-139.552	-138.552	6.304	-7.304
17	GGAFSSL	-136.007	-135.007	9.513	-10.513
18	GAFSSLA	-120.949	-119.949	8.461	-9.461

10	QGGNGGYQQQQGQSGGAFSSLASMA				
0	QGGNGGY	-123.580	-122.580	10.805	-11.805
1	GGNGGYQ	-129.096	-128.096	10.688	-11.688
2	GNGGYQQ	-136.830	-135.830	9.871	-10.871
3	NGGYQQQ	-128.269	-127.269	9.454	-10.454
4	GGYQQQQ	-109.489	-108.489	9.906	-10.906

5	GYQQQQG	-143.865	-142.865	8.135	-9.135
6	YQQQQGQ	-97.305	-96.305	11.766	-12.766
7	QQQQGQS	-125.598	-124.598	10.082	-11.082
8	QQQGQSG	-127.229	-126.229	6.358	-7.358
9	QQGQSGG	-128.012	-127.012	5.419	-6.419
10	QGQSGGA	-124.443	-123.443	8.505	-9.505
11	GQSGGAF	-137.919	-136.919	9.679	-10.679
12	QSGGAFS	-125.286	-124.286	8.696	-9.696
13	SGGAFSS	-139.552	-138.552	6.304	-7.304
14	GGAFSSL	-136.007	-135.007	9.513	-10.513
15	GAFSSLA	-120.949	-119.949	8.461	-9.461
16	AFSSLAS	-136.520	-135.520	8.004	-9.004
17	FSSLASM	-115.353	-114.353	7.252	-8.252
18	SSLASMA	-141.178	-140.178	7.914	-8.914
11	NGGYQQQQGQSGGAFSSLASMAQSY				
0	NGGYQQQ	-128.269	-127.269	9.454	-10.454
1	GGYQQQQ	-109.489	-108.489	9.906	-10.906
2	GYQQQQG	-143.865	-142.865	8.135	-9.135
3	YQQQQGQ	-97.305	-96.305	11.766	-12.766
4	QQQQGQS	-125.598	-124.598	10.082	-11.082
5	QQQGQSG	-127.229	-126.229	6.358	-7.358
6	QQGQSGG	-128.012	-127.012	5.419	-6.419
7	QGQSGGA	-124.443	-123.443	8.505	-9.505
8	GQSGGAF	-137.919	-136.919	9.679	-10.679
9	QSGGAFS	-125.286	-124.286	8.696	-9.696
10	SGGAFSS	-139.552	-138.552	6.304	-7.304
11	GGAFSSL	-136.007	-135.007	9.513	-10.513
12	GAFSSLA	-120.949	-119.949	8.461	-9.461
13	AFSSLAS	-136.520	-135.520	8.004	-9.004
14	FSSLASM	-115.353	-114.353	7.252	-8.252
15	SSLASMA	-141.178	-140.178	7.914	-8.914
16	SLASMAQ	-136.456	-135.456	9.653	-10.653
17	LASMAQS	-132.371	-131.371	6.584	-7.584
18	ASMAQSY	-139.584	-138.584	8.134	-9.134
12	YQQQQGQSGGAFSSLASMAQSYLGG				
0	YQQQQGQ	-97.305	-96.305	11.766	-12.766
1	QQQQGQS	-125.598	-124.598	10.082	-11.082
2	QQQGQSG	-127.229	-126.229	6.358	-7.358
3	QQGQSGG	-128.012	-127.012	5.419	-6.419
4	QGQSGGA	-124.443	-123.443	8.505	-9.505
5	GQSGGAF	-137.919	-136.919	9.679	-10.679
6	QSGGAFS	-125.286	-124.286	8.696	-9.696
7	SGGAFSS	-139.552	-138.552	6.304	-7.304
8	GGAFSSL	-136.007	-135.007	9.513	-10.513
9	GAFSSLA	-120.949	-119.949	8.461	-9.461

	10	AFSSLAS	-136.520	-135.520	8.004	-9.004
	11	FSSLASM	-115.353	-114.353	7.252	-8.252
	12	SSLASMA	-141.178	-140.178	7.914	-8.914
	13	SLASMAQ	-136.456	-135.456	9.653	-10.653
	14	LASMAQS	-132.371	-131.371	6.584	-7.584
	15	ASMAQSY	-139.584	-138.584	8.134	-9.134
	16	SMAQSYL	-134.378	-133.378	11.357	-12.357
	17	MAQSYLG	-125.471	-124.471	8.762	-9.762
	18	AQSYLGG	-139.979	-138.979	6.884	-7.884
13		QQGQSGGAFSSLASMAQSYLGGGQT				
	0	QQGQSGG	-128.012	-127.012	5.419	-6.419
	1	QGQSGGA	-124.443	-123.443	8.505	-9.505
	2	GQSGGAF	-137.919	-136.919	9.679	-10.679
	3	QSGGAFS	-125.286	-124.286	8.696	-9.696
	4	SGGAFSS	-139.552	-138.552	6.304	-7.304
	5	GGAFSSL	-136.007	-135.007	9.513	-10.513
	6	GAFSSLA	-120.949	-119.949	8.461	-9.461
	7	AFSSLAS	-136.520	-135.520	8.004	-9.004
	8	FSSLASM	-115.353	-114.353	7.252	-8.252
	9	SSLASMA	-141.178	-140.178	7.914	-8.914
	10	SLASMAQ	-136.456	-135.456	9.653	-10.653
	11	LASMAQS	-132.371	-131.371	6.584	-7.584
	12	ASMAQSY	-139.584	-138.584	8.134	-9.134
	13	SMAQSYL	-134.378	-133.378	11.357	-12.357
	14	MAQSYLG	-125.471	-124.471	8.762	-9.762
	15	AQSYLGG	-139.979	-138.979	6.884	-7.884
	16	QSYLGGG	-95.098	-94.098	8.395	-9.395
	17	SYLGGGQ	-133.775	-132.775	12.440	-13.440
	18	YLGGGQT	-103.288	-102.288	11.516	-12.516
14		QSGGAFSSLASMAQSYLGGGQTQSN				
	0	QSGGAFS	-125.286	-124.286	8.696	-9.696
	1	SGGAFSS	-139.552	-138.552	6.304	-7.304
	2	GGAFSSL	-136.007	-135.007	9.513	-10.513
	3	GAFSSLA	-120.949	-119.949	8.461	-9.461
	4	AFSSLAS	-136.520	-135.520	8.004	-9.004
	5	FSSLASM	-115.353	-114.353	7.252	-8.252
	6	SSLASMA	-141.178	-140.178	7.914	-8.914
	7	SLASMAQ	-136.456	-135.456	9.653	-10.653
	8	LASMAQS	-132.371	-131.371	6.584	-7.584
	9	ASMAQSY	-139.584	-138.584	8.134	-9.134
	10	SMAQSYL	-134.378	-133.378	11.357	-12.357
	11	MAQSYLG	-125.471	-124.471	8.762	-9.762
	12	AQSYLGG	-139.979	-138.979	6.884	-7.884
	13	QSYLGGG	-95.098	-94.098	8.395	-9.395
	14	SYLGGGQ	-133.775	-132.775	12.440	-13.440

15	YLGGGQT	-103.288	-102.288	11.516	-12.516
16	LGGGQTQ	-127.136	-126.136	7.117	-8.117
17	GGGQTQS	-140.464	-139.464	4.875	-5.875
18	GGQTQSN	-143.736	-142.736	4.912	-5.912
15	GAFSSLASMAQSYLGGGQTQSNQQQ				
0	GAFSSLA	-120.949	-119.949	8.461	-9.461
1	AFSSLAS	-136.520	-135.520	8.004	-9.004
2	FSSLASM	-115.353	-114.353	7.252	-8.252
3	SSLASMA	-141.178	-140.178	7.914	-8.914
4	SLASMAQ	-136.456	-135.456	9.653	-10.653
5	LASMAQS	-132.371	-131.371	6.584	-7.584
6	ASMAQSY	-139.584	-138.584	8.134	-9.134
7	SMAQSYL	-134.378	-133.378	11.357	-12.357
8	MAQSYLG	-125.471	-124.471	8.762	-9.762
9	AQSYLGG	-139.979	-138.979	6.884	-7.884
10	QSYLGGG	-95.098	-94.098	8.395	-9.395
11	SYLGGGQ	-133.775	-132.775	12.440	-13.440
12	YLGGGQT	-103.288	-102.288	11.516	-12.516
13	LGGGQTQ	-127.136	-126.136	7.117	-8.117
14	GGGQTQS	-140.464	-139.464	4.875	-5.875
15	GGQTQSN	-143.736	-142.736	4.912	-5.912
16	GQTQSNQ	-140.306	-139.306	6.608	-7.608
17	QTQSNQQ	-126.320	-125.320	9.815	-10.815
18	TQSNQQQ	-134.023	-133.023	7.313	-8.313
16	SSLASMAQSYLGGGQTQSNQQQYNQ				
0	SSLASMA	-141.178	-140.178	7.914	-8.914
1	SLASMAQ	-136.456	-135.456	9.653	-10.653
2	LASMAQS	-132.371	-131.371	6.584	-7.584
3	ASMAQSY	-139.584	-138.584	8.134	-9.134
4	SMAQSYL	-134.378	-133.378	11.357	-12.357
5	MAQSYLG	-125.471	-124.471	8.762	-9.762
6	AQSYLGG	-139.979	-138.979	6.884	-7.884
7	QSYLGGG	-95.098	-94.098	8.395	-9.395
8	SYLGGGQ	-133.775	-132.775	12.440	-13.440
9	YLGGGQT	-103.288	-102.288	11.516	-12.516
10	LGGGQTQ	-127.136	-126.136	7.117	-8.117
11	GGGQTQS	-140.464	-139.464	4.875	-5.875
12	GGQTQSN	-143.736	-142.736	4.912	-5.912
13	GQTQSNQ	-140.306	-139.306	6.608	-7.608
14	QTQSNQQ	-126.320	-125.320	9.815	-10.815
15	TQSNQQQ	-134.023	-133.023	7.313	-8.313
16	QSNQQQY	-122.599	-121.599	10.207	-11.207
17	SNQQQYN	-136.028	-135.028	7.832	-8.832
18	NQQQYNQ	-124.588	-123.588	10.305	-11.305
17	YLGGGQTQSNQQQYNQQGQNNQQQY				

0	YLGGGQT	-103.288	-102.288	11.516	-12.516
1	LGGGQTQ	-127.136	-126.136	7.117	-8.117
2	GGGQTQS	-140.464	-139.464	4.875	-5.875
3	GGQTQSN	-143.736	-142.736	4.912	-5.912
4	GQTQSNQ	-140.306	-139.306	6.608	-7.608
5	QTQSNQQ	-126.320	-125.320	9.815	-10.815
6	TQSNQQQ	-134.023	-133.023	7.313	-8.313
7	QSNQQQY	-122.599	-121.599	10.207	-11.207
8	SNQQQYN	-136.028	-135.028	7.832	-8.832
9	NQQQYNQ	-124.588	-123.588	10.305	-11.305
10	QQQYNQQ	-125.199	-124.199	13.452	-14.452
11	QQYNQQG	-97.586	-96.586	7.013	-8.013
12	QYNQQGQ	-118.097	-117.097	11.535	-12.535
13	YNQQGQN	-100.643	-99.643	8.766	-9.766
14	NQQGQNN	-128.944	-127.944	6.685	-7.685
15	QQGQNNQ	-127.110	-126.110	9.088	-10.088
16	QGQNNQQ	-125.262	-124.262	10.631	-11.631
17	GQNNQQQ	-132.547	-131.547	8.145	-9.145
18	QNNQQQY	-121.988	-120.988	10.823	-11.823

18 NQQQYNQQGQNNQQQYQQQGQNYQH

0	NQQQYNQ	-124.588	-123.588	10.305	-11.305
1	QQQYNQQ	-125.199	-124.199	13.452	-14.452
2	QQYNQQG	-97.586	-96.586	7.013	-8.013
3	QYNQQGQ	-118.097	-117.097	11.535	-12.535
4	YNQQGQN	-100.643	-99.643	8.766	-9.766
5	NQQGQNN	-128.944	-127.944	6.685	-7.685
6	QQGQNNQ	-127.110	-126.110	9.088	-10.088
7	QGQNNQQ	-125.262	-124.262	10.631	-11.631
8	GQNNQQQ	-132.547	-131.547	8.145	-9.145
9	QNNQQQY	-121.988	-120.988	10.823	-11.823
10	NNQQQYQ	-126.054	-125.054	9.868	-10.868
11	NQQQYQQ	-124.217	-123.217	11.768	-12.768
12	QQQYQQQ	-124.959	-123.959	12.083	-13.083
13	QQYQQQG	-97.044	-96.044	7.633	-8.633
14	QYQQQGQ	-123.386	-122.386	12.676	-13.676
15	YQQQGQN	-99.352	-98.352	9.501	-10.501
16	QQQGQNY	-126.064	-125.064	12.430	-13.430
17	QQGQNYQ	-123.643	-122.643	12.942	-13.942
18	QGQNYQH	-122.067	-121.067	13.042	-14.042

19 QYNQQGQNNQQQYQQQGQNYQHQQQ

0	QYNQQGQ	-118.097	-117.097	11.535	-12.535
1	YNQQGQN	-100.643	-99.643	8.766	-9.766
2	NQQGQNN	-128.944	-127.944	6.685	-7.685
3	QQGQNNQ	-127.110	-126.110	9.088	-10.088
4	QGQNNQQ	-125.262	-124.262	10.631	-11.631

	5	GQNNQQQ	-132.547	-131.547	8.145	-9.145
	6	QNNQQQY	-121.988	-120.988	10.823	-11.823
	7	NNQQQYQ	-126.054	-125.054	9.868	-10.868
	8	NQQQYQQ	-124.217	-123.217	11.768	-12.768
	9	QQQYQQQ	-124.959	-123.959	12.083	-13.083
	10	QQYQQQG	-97.044	-96.044	7.633	-8.633
	11	QYQQQGQ	-123.386	-122.386	12.676	-13.676
	12	YQQQGQN	-99.352	-98.352	9.501	-10.501
	13	QQQGQNY	-126.064	-125.064	12.430	-13.430
	14	QQGQNYQ	-123.643	-122.643	12.942	-13.942
	15	QGQNYQH	-122.067	-121.067	13.042	-14.042
	16	GQNYQHQ	-130.685	-129.685	11.368	-12.368
	17	QNYQHQQ	-93.858	-92.858	12.831	-13.831
	18	NYQHQQQ	-126.167	-125.167	10.365	-11.365
20		QQGQNNQQQYQQQGQNYQHQQQGQQ				
	0	QQGQNNQ	-127.110	-126.110	9.088	-10.088
	1	QGQNNQQ	-125.262	-124.262	10.631	-11.631
	2	GQNNQQQ	-132.547	-131.547	8.145	-9.145
	3	QNNQQQY	-121.988	-120.988	10.823	-11.823
	4	NNQQQYQ	-126.054	-125.054	9.868	-10.868
	5	NQQQYQQ	-124.217	-123.217	11.768	-12.768
	6	QQQYQQQ	-124.959	-123.959	12.083	-13.083
	7	QQYQQQG	-97.044	-96.044	7.633	-8.633
	8	QYQQQGQ	-123.386	-122.386	12.676	-13.676
	9	YQQQGQN	-99.352	-98.352	9.501	-10.501
	10	QQQGQNY	-126.064	-125.064	12.430	-13.430
	11	QQGQNYQ	-123.643	-122.643	12.942	-13.942
	12	QGQNYQH	-122.067	-121.067	13.042	-14.042
	13	GQNYQHQ	-130.685	-129.685	11.368	-12.368
	14	QNYQHQQ	-93.858	-92.858	12.831	-13.831
	15	NYQHQQQ	-126.167	-125.167	10.365	-11.365
	16	YQHQQQG	-97.782	-96.782	8.462	-9.462
	17	QHQQQGQ	-122.014	-121.014	12.410	-13.410
	18	HQQQGQQ	-122.432	-121.432	11.881	-12.881
21		QNNQQQYQQQGQNYQHQQQGQQQQ				
	0	QNNQQQY	-121.988	-120.988	10.823	-11.823
	1	NNQQQYQ	-126.054	-125.054	9.868	-10.868
	2	NQQQYQQ	-124.217	-123.217	11.768	-12.768
	3	QQQYQQQ	-124.959	-123.959	12.083	-13.083
	4	QQYQQQG	-97.044	-96.044	7.633	-8.633
	5	QYQQQGQ	-123.386	-122.386	12.676	-13.676
	6	YQQQGQN	-99.352	-98.352	9.501	-10.501
	7	QQQGQNY	-126.064	-125.064	12.430	-13.430
	8	QQGQNYQ	-123.643	-122.643	12.942	-13.942
	9	QGQNYQH	-122.067	-121.067	13.042	-14.042

	10	GQNYQHQ	-130.685	-129.685	11.368	-12.368
	11	QNYQHQQ	-93.858	-92.858	12.831	-13.831
	12	NYQHQQQ	-126.167	-125.167	10.365	-11.365
	13	YQHQQQG	-97.782	-96.782	8.462	-9.462
	14	QHQQQGQ	-122.014	-121.014	12.410	-13.410
	15	HQQQGQQ	-122.432	-121.432	11.881	-12.881
	16	QQQGQQQ	-123.968	-122.968	10.537	-11.537
	17	QQGQQQQ	-125.913	-124.913	9.284	-10.284
	18	QGQQQQQ	-124.935	-123.935	9.916	-10.916
22		QQQYQQQGQNYQHQQQGQQQQQGHS				
	0	QQQYQQQ	-124.959	-123.959	12.083	-13.083
	1	QQYQQQG	-97.044	-96.044	7.633	-8.633
	2	QYQQQGQ	-123.386	-122.386	12.676	-13.676
	3	YQQQGQN	-99.352	-98.352	9.501	-10.501
	4	QQQGQNY	-126.064	-125.064	12.430	-13.430
	5	QQGQNYQ	-123.643	-122.643	12.942	-13.942
	6	QGQNYQH	-122.067	-121.067	13.042	-14.042
	7	GQNYQHQ	-130.685	-129.685	11.368	-12.368
	8	QNYQHQQ	-93.858	-92.858	12.831	-13.831
	9	NYQHQQQ	-126.167	-125.167	10.365	-11.365
	10	YQHQQQG	-97.782	-96.782	8.462	-9.462
	11	QHQQQGQ	-122.014	-121.014	12.410	-13.410
	12	HQQQGQQ	-122.432	-121.432	11.881	-12.881
	13	QQQGQQQ	-123.968	-122.968	10.537	-11.537
	14	QQGQQQQ	-125.913	-124.913	9.284	-10.284
	15	QGQQQQQ	-124.935	-123.935	9.916	-10.916
	16	GQQQQQG	-144.098	-143.098	6.515	-7.515
	17	QQQQQGH	-121.966	-120.966	11.760	-12.760
	18	QQQQGHS	-125.039	-124.039	11.175	-12.175
23		QGQNYQHQQQGQQQQQGHSSSFSAL				
	0	QGQNYQH	-122.067	-121.067	13.042	-14.042
	1	GQNYQHQ	-130.685	-129.685	11.368	-12.368
	2	QNYQHQQ	-93.858	-92.858	12.831	-13.831
	3	NYQHQQQ	-126.167	-125.167	10.365	-11.365
	4	YQHQQQG	-97.782	-96.782	8.462	-9.462
	5	QHQQQGQ	-122.014	-121.014	12.410	-13.410
	6	HQQQGQQ	-122.432	-121.432	11.881	-12.881
	7	QQQGQQQ	-123.968	-122.968	10.537	-11.537
	8	QQGQQQQ	-125.913	-124.913	9.284	-10.284
	9	QGQQQQQ	-124.935	-123.935	9.916	-10.916
	10	GQQQQQG	-144.098	-143.098	6.515	-7.515
	11	QQQQQGH	-121.966	-120.966	11.760	-12.760
	12	QQQQGHS	-125.039	-124.039	11.175	-12.175
	13	QQQGHSS	-126.897	-125.897	9.967	-10.967
	14	QQGHSSS	-126.586	-125.586	7.257	-8.257

	15	QGHSSSF	-113.130	-112.130	10.777	-11.777
	16	GHSSSFS	-139.122	-138.122	10.645	-11.645
	17	HSSSFSA	-125.985	-124.985	9.709	-10.709
	18	SSSFSAL	-133.757	-132.757	8.489	-9.489
24		NYQHQQQGQQQQQGHSSSFSALASM				
	0	NYQHQQQ	-126.167	-125.167	10.365	-11.365
	1	YQHQQQG	-97.782	-96.782	8.462	-9.462
	2	QHQQQGQ	-122.014	-121.014	12.410	-13.410
	3	HQQQGQQ	-122.432	-121.432	11.881	-12.881
	4	QQQGQQQ	-123.968	-122.968	10.537	-11.537
	5	QQGQQQQ	-125.913	-124.913	9.284	-10.284
	6	QGQQQQQ	-124.935	-123.935	9.916	-10.916
	7	GQQQQQG	-144.098	-143.098	6.515	-7.515
	8	QQQQQGH	-121.966	-120.966	11.760	-12.760
	9	QQQQGHS	-125.039	-124.039	11.175	-12.175
	10	QQQGHSS	-126.897	-125.897	9.967	-10.967
	11	QQGHSSS	-126.586	-125.586	7.257	-8.257
	12	QGHSSSF	-113.130	-112.130	10.777	-11.777
	13	GHSSSFS	-139.122	-138.122	10.645	-11.645
	14	HSSSFSA	-125.985	-124.985	9.709	-10.709
	15	SSSFSAL	-133.757	-132.757	8.489	-9.489
	16	SSFSALA	-119.396	-118.396	7.892	-8.892
	17	SFSALAS	-136.817	-135.817	7.995	-8.995
	18	FSALASM	-117.740	-116.740	7.414	-8.414
25		QGQQQQQGHSSSFSALASMASSYLG				
	0	QGQQQQQ	-124.935	-123.935	9.916	-10.916
	1	GQQQQQG	-144.098	-143.098	6.515	-7.515
	2	QQQQQGH	-121.966	-120.966	11.760	-12.760
	3	QQQQGHS	-125.039	-124.039	11.175	-12.175
	4	QQQGHSS	-126.897	-125.897	9.967	-10.967
	5	QQGHSSS	-126.586	-125.586	7.257	-8.257
	6	QGHSSSF	-113.130	-112.130	10.777	-11.777
	7	GHSSSFS	-139.122	-138.122	10.645	-11.645
	8	HSSSFSA	-125.985	-124.985	9.709	-10.709
	9	SSSFSAL	-133.757	-132.757	8.489	-9.489
	10	SSFSALA	-119.396	-118.396	7.892	-8.892
	11	SFSALAS	-136.817	-135.817	7.995	-8.995
	12	FSALASM	-117.740	-116.740	7.414	-8.414
	13	SALASMA	-141.557	-140.557	7.795	-8.795
	14	ALASMAS	-136.618	-135.618	7.888	-8.888
	15	LASMASS	-133.471	-132.471	5.242	-6.242
	16	ASMASSY	-136.244	-135.244	9.120	-10.120
	17	SMASSYL	-133.161	-132.161	11.023	-12.023
	18	MASSYLG	-126.605	-125.605	7.000	-8.000
26		QQQQGHSSSFSALASMASSYLGNNS				

	0	QQQQGHS	-125.039	-124.039	11.175	-12.175
	1	QQQGHSS	-126.897	-125.897	9.967	-10.967
	2	QQGHSSS	-126.586	-125.586	7.257	-8.257
	3	QGHSSSF	-113.130	-112.130	10.777	-11.777
	4	GHSSSFS	-139.122	-138.122	10.645	-11.645
	5	HSSSFSA	-125.985	-124.985	9.709	-10.709
	6	SSSFSAL	-133.757	-132.757	8.489	-9.489
	7	SSFSALA	-119.396	-118.396	7.892	-8.892
	8	SFSALAS	-136.817	-135.817	7.995	-8.995
	9	FSALASM	-117.740	-116.740	7.414	-8.414
	10	SALASMA	-141.557	-140.557	7.795	-8.795
	11	ALASMAS	-136.618	-135.618	7.888	-8.888
	12	LASMASS	-133.471	-132.471	5.242	-6.242
	13	ASMASSY	-136.244	-135.244	9.120	-10.120
	14	SMASSYL	-133.161	-132.161	11.023	-12.023
	15	MASSYLG	-126.605	-125.605	7.000	-8.000
	16	ASSYLGN	-136.932	-135.932	7.590	-8.590
	17	SSYLGNN	-110.172	-109.172	9.476	-10.476
	18	SYLGNNS	-138.245	-137.245	9.537	-10.537
27		QQGHSSSFSALASMASSYLGNNSNS				
	0	QQGHSSS	-126.586	-125.586	7.257	-8.257
	1	QGHSSSF	-113.130	-112.130	10.777	-11.777
	2	GHSSSFS	-139.122	-138.122	10.645	-11.645
	3	HSSSFSA	-125.985	-124.985	9.709	-10.709
	4	SSSFSAL	-133.757	-132.757	8.489	-9.489
	5	SSFSALA	-119.396	-118.396	7.892	-8.892
	6	SFSALAS	-136.817	-135.817	7.995	-8.995
	7	FSALASM	-117.740	-116.740	7.414	-8.414
	8	SALASMA	-141.557	-140.557	7.795	-8.795
	9	ALASMAS	-136.618	-135.618	7.888	-8.888
	10	LASMASS	-133.471	-132.471	5.242	-6.242
	11	ASMASSY	-136.244	-135.244	9.120	-10.120
	12	SMASSYL	-133.161	-132.161	11.023	-12.023
	13	MASSYLG	-126.605	-125.605	7.000	-8.000
	14	ASSYLGN	-136.932	-135.932	7.590	-8.590
	15	SSYLGNN	-110.172	-109.172	9.476	-10.476
	16	SYLGNNS	-138.245	-137.245	9.537	-10.537
	17	YLGNNSN	-106.496	-105.496	9.060	-10.060
	18	LGNNSNS	-126.862	-125.862	6.345	-7.345
28		HSSSFSALASMASSYLGNNSNSNSS				
	0	HSSSFSA	-125.985	-124.985	9.709	-10.709
	1	SSSFSAL	-133.757	-132.757	8.489	-9.489
	2	SSFSALA	-119.396	-118.396	7.892	-8.892
	3	SFSALAS	-136.817	-135.817	7.995	-8.995
	4	FSALASM	-117.740	-116.740	7.414	-8.414

5	SALASMA	-141.557	-140.557	7.795	-8.795
6	ALASMAS	-136.618	-135.618	7.888	-8.888
7	LASMASS	-133.471	-132.471	5.242	-6.242
8	ASMASSY	-136.244	-135.244	9.120	-10.120
9	SMASSYL	-133.161	-132.161	11.023	-12.023
10	MASSYLG	-126.605	-125.605	7.000	-8.000
11	ASSYLGN	-136.932	-135.932	7.590	-8.590
12	SSYLGNN	-110.172	-109.172	9.476	-10.476
13	SYLGNNS	-138.245	-137.245	9.537	-10.537
14	YLGNNSN	-106.496	-105.496	9.060	-10.060
15	LGNNSNS	-126.862	-125.862	6.345	-7.345
16	GNNSNSN	-135.967	-134.967	5.195	-6.195
17	NNSNSNS	-131.628	-130.628	5.333	-6.333
18	NSNSNSS	-124.428	-123.428	5.410	-6.410
29	SFSALASMASSYLGNNSNSNSSYGG				
0	SFSALAS	-136.817	-135.817	7.995	-8.995
1	FSALASM	-117.740	-116.740	7.414	-8.414
2	SALASMA	-141.557	-140.557	7.795	-8.795
3	ALASMAS	-136.618	-135.618	7.888	-8.888
4	LASMASS	-133.471	-132.471	5.242	-6.242
5	ASMASSY	-136.244	-135.244	9.120	-10.120
6	SMASSYL	-133.161	-132.161	11.023	-12.023
7	MASSYLG	-126.605	-125.605	7.000	-8.000
8	ASSYLGN	-136.932	-135.932	7.590	-8.590
9	SSYLGNN	-110.172	-109.172	9.476	-10.476
10	SYLGNNS	-138.245	-137.245	9.537	-10.537
11	YLGNNSN	-106.496	-105.496	9.060	-10.060
12	LGNNSNS	-126.862	-125.862	6.345	-7.345
13	GNNSNSN	-135.967	-134.967	5.195	-6.195
14	NNSNSNS	-131.628	-130.628	5.333	-6.333
15	NSNSNSS	-124.428	-123.428	5.410	-6.410
16	SNSNSSY	-135.519	-134.519	9.073	-10.073
17	NSNSSYG	-123.996	-122.996	6.838	-7.838
18	SNSSYGG	-137.454	-136.454	5.879	-6.879
30	ALASMASSYLGNNSNSNSSYGGQQQ				
0	ALASMAS	-136.618	-135.618	7.888	-8.888
1	LASMASS	-133.471	-132.471	5.242	-6.242
2	ASMASSY	-136.244	-135.244	9.120	-10.120
3	SMASSYL	-133.161	-132.161	11.023	-12.023
4	MASSYLG	-126.605	-125.605	7.000	-8.000
5	ASSYLGN	-136.932	-135.932	7.590	-8.590
6	SSYLGNN	-110.172	-109.172	9.476	-10.476
7	SYLGNNS	-138.245	-137.245	9.537	-10.537
8	YLGNNSN	-106.496	-105.496	9.060	-10.060
9	LGNNSNS	-126.862	-125.862	6.345	-7.345

	10	GNNSNSN	-135.967	-134.967	5.195	-6.195
	11	NNSNSNS	-131.628	-130.628	5.333	-6.333
	12	NSNSNSS	-124.428	-123.428	5.410	-6.410
	13	SNSNSSY	-135.519	-134.519	9.073	-10.073
	14	NSNSSYG	-123.996	-122.996	6.838	-7.838
	15	SNSSYGG	-137.454	-136.454	5.879	-6.879
	16	NSSYGGQ	-126.302	-125.302	10.707	-11.707
	17	SSYGGQQ	-109.320	-108.320	9.651	-10.651
	18	SYGGQQQ	-134.276	-133.276	9.719	-10.719
31		SMASSYLGNNSNSNSSYGGQQQANE				
	0	SMASSYL	-133.161	-132.161	11.023	-12.023
	1	MASSYLG	-126.605	-125.605	7.000	-8.000
	2	ASSYLGN	-136.932	-135.932	7.590	-8.590
	3	SSYLGNN	-110.172	-109.172	9.476	-10.476
	4	SYLGNNS	-138.245	-137.245	9.537	-10.537
	5	YLGNNSN	-106.496	-105.496	9.060	-10.060
	6	LGNNSNS	-126.862	-125.862	6.345	-7.345
	7	GNNSNSN	-135.967	-134.967	5.195	-6.195
	8	NNSNSNS	-131.628	-130.628	5.333	-6.333
	9	NSNSNSS	-124.428	-123.428	5.410	-6.410
	10	SNSNSSY	-135.519	-134.519	9.073	-10.073
	11	NSNSSYG	-123.996	-122.996	6.838	-7.838
	12	SNSSYGG	-137.454	-136.454	5.879	-6.879
	13	NSSYGGQ	-126.302	-125.302	10.707	-11.707
	14	SSYGGQQ	-109.320	-108.320	9.651	-10.651
	15	SYGGQQQ	-134.276	-133.276	9.719	-10.719
	16	YGGQQQA	-105.784	-104.784	8.794	-9.794
	17	GGQQQAN	-142.530	-141.530	6.297	-7.297
	18	GQQQANE	-144.247	-143.247	8.736	-9.736
32		SSYLGNNSNSNSSYGGQQQANEYGR				
	0	SSYLGNN	-110.172	-109.172	9.476	-10.476
	1	SYLGNNS	-138.245	-137.245	9.537	-10.537
	2	YLGNNSN	-106.496	-105.496	9.060	-10.060
	3	LGNNSNS	-126.862	-125.862	6.345	-7.345
	4	GNNSNSN	-135.967	-134.967	5.195	-6.195
	5	NNSNSNS	-131.628	-130.628	5.333	-6.333
	6	NSNSNSS	-124.428	-123.428	5.410	-6.410
	7	SNSNSSY	-135.519	-134.519	9.073	-10.073
	8	NSNSSYG	-123.996	-122.996	6.838	-7.838
	9	SNSSYGG	-137.454	-136.454	5.879	-6.879
	10	NSSYGGQ	-126.302	-125.302	10.707	-11.707
	11	SSYGGQQ	-109.320	-108.320	9.651	-10.651
	12	SYGGQQQ	-134.276	-133.276	9.719	-10.719
	13	YGGQQQA	-105.784	-104.784	8.794	-9.794
	14	GGQQQAN	-142.530	-141.530	6.297	-7.297

	15	GQQQANE	-144.247	-143.247	8.736	-9.736
	16	QQQANEY	-127.463	-126.463	11.464	-12.464
	17	QQANEYG	-130.110	-129.110	6.883	-7.883
	18	QANEYGR	-119.700	-118.700	8.554	-9.554
33		LGNNSNSNSSYGGQQQANEYGRPQQ				
	0	LGNNSNS	-126.862	-125.862	6.345	-7.345
	1	GNNSNSN	-135.967	-134.967	5.195	-6.195
	2	NNSNSNS	-131.628	-130.628	5.333	-6.333
	3	NSNSNSS	-124.428	-123.428	5.410	-6.410
	4	SNSNSSY	-135.519	-134.519	9.073	-10.073
	5	NSNSSYG	-123.996	-122.996	6.838	-7.838
	6	SNSSYGG	-137.454	-136.454	5.879	-6.879
	7	NSSYGGQ	-126.302	-125.302	10.707	-11.707
	8	SSYGGQQ	-109.320	-108.320	9.651	-10.651
	9	SYGGQQQ	-134.276	-133.276	9.719	-10.719
	10	YGGQQQA	-105.784	-104.784	8.794	-9.794
	11	GGQQQAN	-142.530	-141.530	6.297	-7.297
	12	GQQQANE	-144.247	-143.247	8.736	-9.736
	13	QQQANEY	-127.463	-126.463	11.464	-12.464
	14	QQANEYG	-130.110	-129.110	6.883	-7.883
	15	QANEYGR	-119.700	-118.700	8.554	-9.554
	16	ANEYGRP	-136.798	-135.798	7.993	-8.993
	17	NEYGRPQ	-82.895	-81.895	11.626	-12.626
	18	EYGRPQQ	-122.905	-121.905	12.291	-13.291
34		NSNSNSSYGGQQQANEYGRPQQNGQ				
	0	NSNSNSS	-124.428	-123.428	5.410	-6.410
	1	SNSNSSY	-135.519	-134.519	9.073	-10.073
	2	NSNSSYG	-123.996	-122.996	6.838	-7.838
	3	SNSSYGG	-137.454	-136.454	5.879	-6.879
	4	NSSYGGQ	-126.302	-125.302	10.707	-11.707
	5	SSYGGQQ	-109.320	-108.320	9.651	-10.651
	6	SYGGQQQ	-134.276	-133.276	9.719	-10.719
	7	YGGQQQA	-105.784	-104.784	8.794	-9.794
	8	GGQQQAN	-142.530	-141.530	6.297	-7.297
	9	GQQQANE	-144.247	-143.247	8.736	-9.736
	10	QQQANEY	-127.463	-126.463	11.464	-12.464
	11	QQANEYG	-130.110	-129.110	6.883	-7.883
	12	QANEYGR	-119.700	-118.700	8.554	-9.554
	13	ANEYGRP	-136.798	-135.798	7.993	-8.993
	14	NEYGRPQ	-82.895	-81.895	11.626	-12.626
	15	EYGRPQQ	-122.905	-121.905	12.291	-13.291
	16	YGRPQQN	-91.233	-90.233	9.204	-10.204
	17	GRPQQNG	-145.851	-144.851	6.652	-7.652
	18	RPQQNGQ	-96.043	-95.043	16.013	-17.013

Each prion sequence was analyzed in windows of seven residues at a time. Each window was used as a peptide sequence binding the active pocket of Ydj1. The corresponding energy values computed using Medusa are shown in the table. S no., sequence number; W no., window number