



nHLAPred
A neural network based MHC Class-I Binding Peptide Prediction Server

[Home](#)
[ComPred](#)
[ANNPred](#)
[References](#)
[Help](#)
[Matrices](#)
[Team](#)
[Contact](#)

Antigen Name	Untitled
Scanned on	Thu Feb 18 13:57:41 2010
Length of input sequence	232 amino acids
Number of nonamers from input sequence	224
Threshold setting	.5
Number of alleles in query	67
Number of top scorers to be displayed	4
Number of top scorers to be displayed	4
Proteosome Filter	on at 5 threshold
ImmunoProteosome Filter	on at 5 threshold

ALLELE: HLA-A1				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RADIDRRVA	26	0.820
ANNs+QM	2	APSPVAAAF	36	0.670
ANNs+QM	3	AAFASAAAI	91	0.550
ANNs+QM	4	VSRPLGAGT	133	0.300

ALLELE: HLA-A2				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	AAAPSPVAA	34	0.510
ANNs+QM	2	AVGLGAFGL	100	0.410
ANNs+QM	3	ELLELATPY	8	0.240
ANNs+QM	4	HTDFELLEL	4	0.180

ALLELE: HLA-A*0201				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	HTDFELLELEL	4	1.000
ANNS+QM	2	AVGLGAFGL	100	1.000
ANNS+QM	3	RVAAAPSPV	32	0.940
ANNS+QM	4	TTAEPPAHL	62	0.920

ALLELE: HLA-A*0202				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	VTPSTTATL	191	0.990
ANNS+QM	2	TTAEPPAHL	62	0.980
ANNS+QM	3	AVGLGAFGL	100	0.900
ANNS+QM	4	STTATLTDL	194	0.830

ALLELE: HLA-A*0203				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	STTATLTDL	194	0.980
ANNS+QM	2	RVAAAPSPV	32	0.940
ANNS+QM	3	TTAEPPAHL	62	0.840
ANNS+QM	4	VTPSTTATL	191	0.820

ALLELE: HLA-A*0206				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	TVAEQVLTA	119	0.960
ANNS+QM	2	RVAAAPSPV	32	0.850
ANNS+QM	3	WRTAAFASA	88	0.370
ANNS+QM	4	AAAPSPVAA	34	0.260

ALLELE: HLA-A*0205				
Threshold for 4 % with score: 5.950				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AVGLGAFGL	100	11.990
QM	2	DVRTVSRPL	129	9.010
QM	3	TTAEPPAHL	62	8.610
QM	4	AEPPAHLRT	64	6.760

ALLELE: HLA-A*1101				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	ELLELATPY	8	0.800
ANNS+QM	2	RVAAAPSPV	32	0.550
ANNS+QM	3	STTATLTDL	194	0.270
ANNS+QM	4	DVRTVSRPL	129	0.180

ALLELE: HLA-A11				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	AAFASAAAI	91	0.940
ANNS+QM	2	RVAAAPSPV	32	0.920
ANNS+QM	3	ASAAAIAVG	94	0.860
ANNS+QM	4	RTAAFASAA	89	0.640

ALLELE: HLA-A24				
Threshold for 4 % with score: 7.670				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TTAEPPAHL	62	10.610
QM	2	SPQPTGTIL	218	10.250
QM	3	AVGLGAFGL	100	8.520
QM	4	APSPVAAAF	36	6.750

ALLELE: HLA-A*2402				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	SPQPTGTIL	218	0.270
ANNS+QM	2	RWRTAAFAS	87	0.250
ANNS+QM	3	APSPVAAAF	36	0.240
ANNS+QM	4	SAAAIIVGL	95	0.240

ALLELE: HLA-A3				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	RTAAFASAA	89	1.000
ANNS+QM	2	ELLELATPY	8	0.980
ANNS+QM	3	RRQSRWRTA	83	0.970
ANNS+QM	4	TPYALNAVS	14	0.960

ALLELE: HLA-A*3101				
Threshold for 4 % with score: -1.609				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TVAEQVLTA	119	-2.526
QM	2	RVAAAPSPV	32	-2.813
QM	3	AVGLGAFGL	100	-2.813

ALLELE: HLA-A31				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	VSRPLGAGT	133	0.760
ANNS+QM	2	TPYALNAVS	14	0.640
ANNS+QM	3	VAAAPSPVA	33	0.630
ANNS+QM	4	ASAAAIIVG	94	0.550

ALLELE: HLA-A*0301				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	ELLELATPY	8	0.970
ANNS+QM	2	AFASAAAIA	92	0.970
ANNS+QM	3	AHLRTAILD	68	0.930
ANNS+QM	4	AAFASAAAI	91	0.740

ALLELE: HLA-A*3302				
Threshold for 4 % with score: -0.105				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	EVRAVRETM	47	0.405
QM	2	DVRTVSRPL	129	0.405
QM	3	AVGLGAFGL	100	-0.693

ALLELE: HLA-A68.1				
Threshold for 4 % with score: 1.609				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	EVRAVRETM	47	2.485
QM	2	DVRTVSRPL	129	2.485
QM	3	RVAAAPSPV	32	2.079
QM	4	AVGLGAFGL	100	2.079

ALLELE: HLA-A20 Cattle				
Threshold for 4 % with score: 3.401				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	ELLELATPY	8	2.708
QM	2	HTDFELLEL	4	1.609
QM	3	APSPVAAAF	36	1.609
QM	4	TTAEPPAHL	62	1.609

ALLELE: HLA-A2.1				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	FASAAAIAV	93	0.940
ANNS+QM	2	ELLELATPY	8	0.930
ANNS+QM	3	HTDFELLEL	4	0.890
ANNS+QM	4	AVGLGAFGL	100	0.880

ALLELE: HLA-B14				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	SAAAIAVGL	95	0.940
ANNS+QM	2	SRWRTAafa	86	0.930
ANNS+QM	3	RADIDRRVA	26	0.910
ANNS+QM	4	STTATLTDL	194	0.900

ALLELE: HLA-B*2702				
Threshold for 4 % with score: 0.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SRWRTAafa	86	4.605
QM	2	WRTAAFASA	88	2.996
QM	3	RRQSRWRTA	83	2.890
QM	4	VRETMAVVS	51	2.303

ALLELE: HLA-B27				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	VRETMAVVS	51	0.920
ANNS+QM	2	RADIDRRVA	26	0.400
ANNS+QM	3	RRVAAAPSP	31	0.320
ANNS+QM	4	RRQSRWRTA	83	0.250

ALLELE: HLA-B*2705				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	RRVAAAPSP	31	0.910
ANNS+QM	2	VRETMAVVS	51	0.900
ANNS+QM	3	SRWRTAIFA	86	0.750
ANNS+QM	4	WRTAAFASA	88	0.720

ALLELE: HLA-B*3501				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	APSPVAAAF	36	1.000
ANNS+QM	2	SPQPTGTIL	218	1.000
ANNS+QM	3	TPYALNAVS	14	0.970
ANNS+QM	4	RRQSRWRTA	83	0.730

ALLELE: HLA-B*3701				
Threshold for 4 % with score: 0.405				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TDLGASTAL	200	3.689
QM	2	LELATPYAL	10	2.303
QM	3	ADIDRRVAA	27	1.386
QM	4	SAAAIIVGL	95	0.405

ALLELE: HLA-B*3801				
Threshold for 4 % with score: 0.445				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	HTDFELLELE	4	1.099
QM	2	APSPVAAAF	36	0.956
QM	3	TTAEPPAHL	62	0.693
QM	4	SPQPTGTIL	218	0.693

ALLELE: HLA-B*3901				
Threshold for 4 % with score: 1.792				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	HTDFELLELEL	4	2.603
QM	2	TTAEPPAHL	62	1.792
QM	3	STTATLTDL	194	1.504
QM	4	SAAAIIVGL	95	1.099

ALLELE: HLA-B*3902				
Threshold for 4 % with score: 0.693				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SAAAIIVGL	95	0.875
QM	2	HTDFELLELEL	4	0.693
QM	3	TTAEPPAHL	62	0.693
QM	4	AVGLGAFGL	100	0.693

ALLELE: HLA-B40				
Threshold for 4 % with score: 0.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	3.689
QM	2	ADIDRRVAA	27	2.996
QM	3	RETMAVVSA	52	2.996
QM	4	AEPPAHLRT	64	2.773

ALLELE: HLA-B*4403				
Threshold for 4 % with score: 0.405				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AEPPAHLRT	64	3.178
QM	2	RETMAVVSA	52	2.890
QM	3	APSPVAAAF	36	2.197
QM	4	LELATPYAL	10	2.079

ALLELE: HLA-B*5101				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	TPYALNAVS	14	0.910
ANNS+QM	2	FASAAAAIAV	93	0.880
ANNS+QM	3	PPTVAEQVL	117	0.730
ANNS+QM	4	AAFASAAAAI	91	0.650

ALLELE: HLA-B*5102				
Threshold for 4 % with score: 9.050				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	FASAAAAIAV	93	12.770
QM	2	AAFASAAAAI	91	9.490
QM	3	SPQPTGTIL	218	9.390
QM	4	APSPVAAAAF	36	7.890

ALLELE: HLA-B*5103				
Threshold for 4 % with score: 9.280				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	APSPVAAAAF	36	12.890
QM	2	FASAAAAIAV	93	12.770
QM	3	AAFASAAAAI	91	9.490
QM	4	SPQPTGTIL	218	9.390

ALLELE: HLA-B*5201				
Threshold for 4 % with score: 1.974				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SPQPTGTIL	218	2.890
QM	2	TPYALNAVS	14	2.580
QM	3	APSPVAAAAF	36	1.792
QM	4	AAFASAAAAI	91	1.792

ALLELE: HLA-B*5301				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	APSPVAAAF	36	1.000
ANNS+QM	2	PPTVAEQVL	117	1.000
ANNS+QM	3	SPQPTGTIL	218	1.000
ANNS+QM	4	TPYALNAVS	14	0.980

ALLELE: HLA-B*5401				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	APSPVAAAF	36	1.000
ANNS+QM	2	TPYALNAVS	14	0.990
ANNS+QM	3	PPTVAEQVL	117	0.980
ANNS+QM	4	SPQPTGTIL	218	0.920

ALLELE: HLA-B*51				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	PPTVAEQVL	117	0.980
ANNS+QM	2	SPQPTGTIL	218	0.940
ANNS+QM	3	TPYALNAVS	14	0.880
ANNS+QM	4	APSPVAAAF	36	0.670

ALLELE: HLA-B*5801				
Threshold for 4 % with score: -0.223				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	RTAAFASAA	89	2.197
QM	2	APSPVAAAF	36	1.792
QM	3	VSRPLGAGT	133	1.792
QM	4	TTAEPPAHL	62	1.386

ALLELE: HLA-B60				
Threshold for 4 % with score: 1.386				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	6.461
QM	2	TDLGASTAL	200	3.689
QM	3	SAAAIIVGL	95	2.868
QM	4	AEPPAHLRT	64	2.175

ALLELE: HLA-B61				
Threshold for 4 % with score: 0.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	RETMAVVSA	52	3.784
QM	2	LELATPYAL	10	3.178
QM	3	ADIDRRVAA	27	1.609
QM	4	AEPPAHLRT	64	1.386

ALLELE: HLA-B62				
Threshold for 4 % with score: 0.693				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	ELLELATPY	8	4.660
QM	2	APSPVAAAF	36	1.569
QM	3	TLTDLGAST	198	1.482

ALLELE: HLA-B7				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	APSPVAAAF	36	1.000
ANNS+QM	2	SPQPTGTIL	218	1.000
ANNS+QM	3	TPYALNAVS	14	0.940
ANNS+QM	4	PPTVAEQVL	117	0.930

ALLELE: HLA-B*0702				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	TPYALNAVS	14	1.000
ANNS+QM	2	APSPVAAAF	36	1.000
ANNS+QM	3	SPQPTGTIL	218	1.000
ANNS+QM	4	PPTVAEQVL	117	0.990

ALLELE: HLA-B8				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	RADIDRRVA	26	0.720
ANNS+QM	2	TPYALNAVS	14	0.690
ANNS+QM	3	AEPPAHLRT	64	0.650
ANNS+QM	4	PPTVAEQVL	117	0.620

ALLELE: HLA-Cw*0301				
Threshold for 4 % with score: 2.015				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	2.996
QM	2	TDLGASTAL	200	2.996
QM	3	SPQPTGTIL	218	2.303
QM	4	SAAAIIVGL	95	1.386

ALLELE: HLA-Cw*0401				
Threshold for 4 % with score: 4.370				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	PPTVAEQVL	117	9.490
QM	2	STTATLTDL	194	8.430
QM	3	SPQPTGTIL	218	7.310
QM	4	HTDFELLEL	4	5.230

ALLELE: HLA-Cw*0602				
Threshold for 4 % with score: 1.482				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SAAAI AVGL	95	1.887
QM	2	HTDFELLEL	4	1.386
QM	3	STTATLTDL	194	1.386
QM	4	ELLELATPY	8	1.099

ALLELE: HLA-Cw*0702				
Threshold for 4 % with score: 1.212				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	APSPVAAAF	36	2.311
QM	2	ELLELATPY	8	2.079
QM	3	SAAAI AVGL	95	0.971
QM	4	SPQPTGTIL	218	0.924

ALLELE: H2-Db				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RRQSRWRTA	83	0.830
ANNs+QM	2	SPQPTGTIL	218	0.680
ANNs+QM	3	AFASAAAIA	92	0.550
ANNs+QM	4	TDLGASTAL	200	0.480

ALLELE: H2-Dd				
Threshold for 4 % with score: 11.800				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	VTPSTTATL	191	17.090
QM	2	AEPPAHLRT	64	15.290
QM	3	SPQPTGTIL	218	12.730
QM	4	APSPVAAAF	36	12.310

ALLELE: H2-Kb				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	TDLGASTAL	200	0.940
ANNS+QM	2	PPTVAEQVL	117	0.930
ANNS+QM	3	VTPSTTATL	191	0.860
ANNS+QM	4	TTAEPPAHL	62	0.780

ALLELE: H2-Kd				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	SPQPTGTIL	218	1.000
ANNS+QM	2	TTAEPPAHL	62	0.980
ANNS+QM	3	PPTVAEQVL	117	0.840
ANNS+QM	4	VTPSTTATL	191	0.770

ALLELE: H2-Kk				
Threshold for 4 % with score: 1.609				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	2.996
QM	2	AEPPAHLRT	64	2.303
QM	3	RETMAVVSA	52	1.609
QM	4	AAFASAAAI	91	1.609

ALLELE: H2-Ld				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	APSPVAAAF	36	1.000
ANNS+QM	2	SPQPTGTIL	218	1.000
ANNS+QM	3	STTATLTDL	194	0.790
ANNS+QM	4	PPTVAEQVL	117	0.750

ALLELE: HLA-G				
Threshold for 4 % with score: 9.260				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	VTPSTTATL	191	12.840
QM	2	AEPPAHLRT	64	12.400
QM	3	TTAEPPAHL	62	11.440
QM	4	TVAEQVLTA	119	11.000

ALLELE: H-2Qa				
Threshold for 4 % with score: 6.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	8.210
QM	2	SPQPTGTIL	218	7.470
QM	3	TTAEPPAHL	62	5.800
QM	4	SAAAIIVGL	95	5.470

ALLELE: HLA-B*2706				
Threshold for 4 % with score: 5.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AVGLGAFGL	100	1.600
QM	2	RTAAFASAA	89	1.340
QM	3	AAAPSPVAA	34	1.270
QM	4	RRQSRWRTA	83	1.040

ALLELE: HLA-B35				
Threshold for 4 % with score: 8.350				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SPQPTGTIL	218	15.730
QM	2	APSPVAAAF	36	14.370
QM	3	PPTVAEQVL	117	10.050
QM	4	EVRAVRETM	47	8.780

ALLELE: Mamu-A*01				
Threshold for 4 % with score: 3.650				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	VTPSTTATL	191	6.110
QM	2	AEPPAHLRT	64	3.930
QM	3	TVAEQVLTA	119	2.120
QM	4	DVRTVSRPL	129	1.780

ALLELE: HLA-A*0204				
Threshold for 4 % with score: 12.070				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SAAAIAVGL	95	14.560
QM	2	LELATPYAL	10	13.530
QM	3	TTAEPPAHL	62	12.220
QM	4	FASAAAIIV	93	12.000

ALLELE: HLA-B*2703				
Threshold for 4 % with score: 5.130				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	HTDFELLEL	4	4.270
QM	2	WRTAAFASA	88	3.380
QM	3	SRWRTAIFA	86	3.040
QM	4	RRVAAAPSP	31	2.270

ALLELE: HLA-B*2704				
Threshold for 4 % with score: 8.790				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	RRQSRWRTA	83	11.900
QM	2	RVAAAPSPV	32	11.150
QM	3	TDLGASTAL	200	9.930
QM	4	WRTAAFASA	88	9.770

ALLELE: HLA-B*2902				
Threshold for 4 % with score: 7.750				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	11.980
QM	2	AEPPAHLRT	64	8.650
QM	3	SPQPTGTIL	218	8.510
QM	4	APSPVAAAF	36	6.260

ALLELE: HLA-A*3301				
Threshold for 4 % with score: 3.840				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AAFASAAAI	91	4.050
QM	2	VAAAPSPVA	33	2.640
QM	3	AAAPSPVAA	34	2.310
QM	4	DVRTVSRPL	129	2.070

ALLELE: HLA-B44				
Threshold for 4 % with score: 4.900				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LELATPYAL	10	7.420
QM	2	AVGLGAFGL	100	6.370
QM	3	AAFASAAAI	91	4.270
QM	4	SAAAI AVGL	95	3.800

ALLELE: HLA-A*6801				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	AAFASAAAI	91	0.980
ANNs+QM	2	RVAAAPSPV	32	0.850
ANNs+QM	3	AFASAAAIA	92	0.830
ANNs+QM	4	TDLGASTAL	200	0.800

ALLELE: HLA-A*6802				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNS+QM	1	TTAEPPAHL	62	0.990
ANNS+QM	2	FASAAAIIV	93	0.980
ANNS+QM	3	AGTATVVFS	139	0.980
ANNS+QM	4	RADIDRRVA	26	0.970