

## ABCpred Prediction Server

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### INPUT INFORMATION

Sequence name	
Length of the sequence	625
Number of 16mers from the input sequence	610
Threshold setting (Default value is 0.5)	0.51

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### TABULAR RESULT

#### Predicted B-cell epitope

The predicted B cell epitopes are ranked according to their score obtained by trained recurrent neural network.

Higher score of the peptide means the higher probability to be as epitope.  
All the peptides shown here are above the threshold value chosen.

Rank	Sequence	Start position	Score
1	VKELTGGKEPNKGVN	326	0.96
2	TSINLPYITVDADKNP	251	0.95
3	EAHAEEDRKRRREEADV	494	0.91
4	APEISARILMKLKRDA	88	0.90
4	RGIPQIEVTFDIDANG	441	0.90
5	GEKEQRILVFSDLGGGT	160	0.88
6	EVRATSGDNHLGGDDW	189	0.87
7	HMGSDWSIEIDGKKYT	72	0.86
7	AHPGGEPGGAHPGSAD	595	0.86
7	DRMIKDAEAAHAEEDRK	487	0.86
7	TKRSETFTTADDNQPS	394	0.86
7	KGGVMTRLIERNTTIP	378	0.86

7	HVVLVGGSTRMPAVTD	309	0.86	
7	KGTSGIDLTKDKMAMQ	217	0.86	
7	DAVITTPAYFNDAQRQ	113	0.86	
8	SGLSKEDIDRMIKDAE	479	0.83	
9	KVPEDTLNKVDAAAVE	535	0.82	
10	GGDDWDQRVVVDLWVK	200	0.81	
10	VVSVLEGGDPVVVANS	15	0.81	
11	EAEGGSKVVPEDTLNKV	529	0.80	
11	FELTGIPPAPRGIPQI	431	0.80	
11	AVGIDLGTTNSVSVL	4	0.80	
12	DRTVRSVKRHMGSDWS	63	0.79	
12	GQAIYEAAQAASQATG	578	0.79	
12	IERNNTTIPTKRSETFT	386	0.79	
12	FQRITQDLDLDRTRKPF	278	0.79	
12	DKMAMQRLREAAEKAK	227	0.79	
12	AGQIAGLNVLRIVNEP	133	0.79	
13	GQESQALGQAIYEAAQ	571	0.78	
13	SLGIETKGGVMTRLIE	372	0.78	
13	GDPVVVANSEGSRTTP	22	0.78	
13	DAQRQATKDAGQIAGL	124	0.78	
14	DDVVDAEVVDDGREAK	610	0.77	
14	HVTAKDKGTGKENTIR	459	0.77	
14	TFDIDANGIVHVTAKD	449	0.77	
15	DGKKYTAPEISARILM	82	0.76	
15	AHPGSADDVVDAEVVD	604	0.76	
15	EVLVGQPAKNQAVTNV	47	0.76	
15	KRDAEAYLGEDITDAV	100	0.76	
16	QAASQATGAAHPGGEPE	586	0.75	
16	GKEPNKGVPNPDEVVAV	332	0.75	
16	SVSEIDHVVLVGGSTR	303	0.75	
16	EAAEKAKIELSSSQST	236	0.75	
17	GSDISAIIKSAMEKLGQ	557	0.74	
17	SIVAFARNGEVLVGQP	38	0.74	
17	VVAVGAALQAGVLKGE	344	0.74	

18	ANSEGSRTTPSIVAF	28	0.73
19	WLVDFKFKGTSGIDLT	211	0.72
19	LVFDLGGGTFDVSLL	167	0.72
20	RKRREEADVRNQAETL	501	0.71
20	TVDADKNPLFLDEQLT	259	0.71
21	SVQIQVYQGEREIAAH	409	0.69
22	SAMEKLGQESQALGQA	565	0.68
23	FTTADDNQPSVQIQVY	400	0.67
23	GVNPDEVVAVGAALQA	338	0.67
24	LDEQLTRAEFQRITQD	269	0.66
25	ETLVYQTEKFVKEQRE	514	0.65
25	QAGVLKGEVKDVLLLD	352	0.65
26	SLLEIGEGVVEVRATS	179	0.64
27	YQGEREIAAHNKLLGS	415	0.63
27	PTAAALAYGLDKGEKE	148	0.63
28	MPAVTDLVKELTGGKE	319	0.61
29	DRTRKPFQSVIADTGI	287	0.59
30	GGTFDVSLLLEIGEGVV	173	0.57

## OVERLAP DISPLAY

MARAVGIDLGTTNSVVSVLEGGDPVVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVTNVDRTVRSV  
 KRHMGS DWSIEIDGKKYTAPEISARILMKLKRDAEAYLG EDITDAVITTPAYFNDAQRQATKDAGQIAG  
 LNVLRIVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVSLLIEIGEVVEVRATSGDNHLGGDDWDQR  
 VVDWLVDKFKG TSGIDLTKDKMAMQRLREAAEKAKIELSSSQSTSINLPYITVDADKNPLFLDEQLTRA  
 EFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVV LVGGSTRMPAVTDLVKELTGGKEPNKGVPDEVV  
 AVG AALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRLIERNTTIPTKSETFTTADDNQPSVQIQV  
 YQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDIDANGIVHVTAKDKGTGKENTIRIQEGLSK  
 EDIDRM IKDAEAHAEE DRKREEADVRNQAETLVYQTEKFVKEQREAEGGSKV PDET LNKVDAVAEAK  
 AALGGSDISA IKSAMEKLGQESQALGQAIYEAAQAASQATGAAHPGGE PGGAHPGSADDVVDAEVVDDG  
 REAK<sup>625</sup>

VKELTGGKEPNKGVNP

TSINLPYITVDADKNP

EAHAEEDRKREEADV

APEISARILMKLKRDA

RGIPQIEVTFDIDANG

GEKEQRILVFDLGGGT-----

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EVRATSGDNHLGGDDW-----

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HMGSDWSIEIDGKKYT-----

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AHPGGEPGGAHPGSAD-----

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DRMIKDAEAHAEEDRK-----

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TKRSETFTTADDNQPS

KGGVMTRLIERNTTIP

HVVLVGGSTRMPAVTD

KGTSGIDLTKDKMAMQ

DAVITTPAYFNDAQRQ

SGLSKEDIDIRMIKDAE

KVPEDTLNKVDAAVAE

GGDDWDQRVVDWLVDK

VVSVLEGGDPVVVANS

EAEGGSKVPEDTLNKV

FELTGIPPAAPRGIPQI

AVGIDLGTTNSVVSVL

DRTVRSVKRHMGS DWS

GQAIYEAAQAASQATG

IERNNTIPTKRSETFT

FQRITQDLLDRTRKPF

DKMAMQRLREAAEKAK

AGQIAGLNVLRIVNEP

GQESQALGQAIYEAAQ

SLGIETKGGMTRLIE

GDPVVVANSEGSRTTP.

DAQRQATKDAGQIAGL

DDVVDAEVVDDGREAK

HVTAKDKGTGKENTIR.

TFDIDANGIVHVTAKD

DGKKYTAPEISARILM

AHPGSADDVVDAEVVD

EVLVGQPAKNQAVTNV

KRDAEAYLGEDITDAV

QAASQATGAAHPGGEP-----

GKEPNKGVPNPDEVVAV-----

SVSEIDHVVLVGGSTR-----

EAAEKAKIELSSSQST-----

GSDISAIKSAMEKLGQ-----

SIVAFARNGEVLVGQP

VVAVGAALQAGVLKGE·

ANSEGSRTTPSIVAF-

WLVVDKFKGTSGLDLTK-

LVFDLGGGTFDVSLLE

RKRREADVRNQAETL

TVDAKKNPLFLDEQLT

SVQIQVYQGEREIAAH

SAMEKLGQESQALGQA

FTTADDNQPSVQIQVY

GVNPDEVVAVGAALQA

LDEQLTRAEFQRITQD

ETLVYQTEKFVKEQRE

QAGVLKGEVKDVLLD

SLLEIGEGVVVRATS

YQGEREIAAHNKLGS

PTAAALAYGLDKGEKE

MPAVTDLVKELTGGKE

DRTRKPFQSVIADTGI

GGTFDVSLLIEIGEGVV

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