# ABCpred Prediction Server

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INPUT INFORMATION

| | |
|---|---|
| Sequence name | |
| Length of the sequence | 941 |
| Number of 16mers from the input sequence | 926 |
| 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 | ASDWDHPYTREQAAYP | 890 | 0.96 | |
| 2 | AGALGDALVHDKYFDT | 372 | 0.95 | |
| 3 | QGYYDTHTPPVLLRNI | 88 | 0.93 | |
| 3 | GGPGVGPVAVRAHLAP | 701 | 0.93 | |
| 4 | VRRIDGAYGDRNLVCS | 918 | 0.92 | |
| 4 | EWPVDDNPLRGAPHTA | 870 | 0.92 | |
| 4 | GVSVDSDGTPAYRLAL | 303 | 0.92 | |
| 5 | ALMITYPSTHGVYEHD | 632 | 0.91 | |
| 6 | PGHPFAPELPKGYPVS | 719 | 0.90 | |
| 6 | EMESITWPEFGRQHPF | 505 | 0.90 | |
| 7 | QAAYPLGTAFRPKVWP | 901 | 0.89 | |

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|---|---|---|---|---|
| 7 | PVLYTGENGMVAHECI | 782 | 0.89 | |
| 7 | TSEFLTHPAFTQYRTE | 454 | 0.89 | |
| 7 | FGVPMGFGGPHAGYLA | 273 | 0.89 | |
| 7 | TLMHRAARGPVKRVVV | 160 | 0.89 | |
| 8 | HRDICLIPSSAHGTNA | 578 | 0.87 | |
| 8 | YHASRGEPHRDICLIP | 570 | 0.87 | |
| 8 | GVIAQLPGASGRITDW | 214 | 0.87 | |
| 8 | YQPEISQGRLEALLNF | 116 | 0.87 | |
| 8 | WYTAYTPYQPEISQGR | 109 | 0.87 | |
| 9 | AVSMIGQGYYDTHTPP | 82 | 0.86 | |
| 9 | GYPVSSAPYGSASILP | 730 | 0.86 | |
| 9 | VVVVDCHDNGDVDLDD | 603 | 0.86 | |
| 9 | TVLARVPGRADEVLAR | 387 | 0.86 | |
| 9 | LTLIAPPGEIGADVAF | 252 | 0.86 | |
| 10 | RAEIDKVGAGEWPVDD | 860 | 0.85 | |
| 10 | DSLPPAASEAEALAEL | 57 | 0.85 | |
| 10 | PGEIGADVAFGTTQRF | 258 | 0.85 | |
| 11 | HLAPFLPGHPFAPELP | 713 | 0.84 | |
| 11 | KTFCIPHGGGGPGVGP | 692 | 0.84 | |
| 11 | HDAGGQVYVDGANLNA | 656 | 0.84 | |
| 11 | AHTDIATRTSEFLTHP | 446 | 0.84 | |
| 11 | KPLGIEIVTADLRAGL | 192 | 0.84 | |
| 12 | LMVEPTESESLAEVDA | 836 | 0.83 | |
| 12 | APTMSFPVAGTLMVEP | 825 | 0.83 | |
| 13 | AHECILDLRGITKLTG | 793 | 0.82 | |
| 13 | DIAEICAAVHDAGGQV | 647 | 0.82 | |
| 13 | RNIIENPAWYTAYTPY | 101 | 0.82 | |
| 14 | ADYGFHAPTMSFPVAG | 819 | 0.81 | |
| 14 | DLRGITKLTGITVDDV | 799 | 0.81 | |
| 14 | PGASGRITDWSALVQQ | 220 | 0.81 | |
| 14 | FQTLVTDLTGLEIANA | 131 | 0.81 | |
| 15 | APYGSASILPITWAYI | 736 | 0.80 | |
| 15 | ASEAEALAELRALADA | 63 | 0.80 | |
| 15 | VPAGILDTLTDTGAAP | 39 | 0.80 | |

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| 15 | AAAEAMTLMHRAARGP | 154 | 0.80 | |
| 16 | PHTAQCLLASDWDHPY | 882 | 0.79 | |
| 16 | PITWAYIRMMGAEGLR | 745 | 0.79 | |
| 16 | GGDVSHLNLHKTFCIP | 682 | 0.79 | |
| 16 | YRLALQTREQHIRRDK | 314 | 0.79 | |
| 17 | ACDEATTDTHVAVVLD | 421 | 0.78 | |
| 17 | AVIGVDSLDDLAVKAV | 24 | 0.78 | |
| 17 | ARGPVKRVVVDADVFT | 166 | 0.78 | |
| 18 | EGLRAASLTAITSANY | 757 | 0.77 | |
| 18 | SMIPLGSCTMKLNAAA | 489 | 0.77 | |
| 18 | ETSMMRYLRALADKDI | 469 | 0.77 | |
| 18 | VLAAMYASYHGAGGLT | 343 | 0.77 | |
| 19 | RLDEYYPVLYTGENGM | 776 | 0.76 | |
| 19 | PVAVRAHLAPFLPGHP | 707 | 0.76 | |
| 19 | APASDTAGLRQLVADL | 521 | 0.76 | |
| 20 | PSTHGVYEHDIAEICA | 638 | 0.75 | |
| 20 | SWLVLITGYDAVSLQP | 538 | 0.75 | |
| 20 | TMKLNAAAEMESITWP | 497 | 0.75 | |
| 20 | VAAAAPAHTDIATRTS | 440 | 0.75 | |
| 21 | DRHIGLDSQAVATMLA | 9 | 0.74 | |
| 21 | TNAASAALAGMRVVVV | 591 | 0.74 | |
| 21 | GAGGLTAIARRVHAHA | 353 | 0.74 | |
| 21 | HIRRDKATSNICTAQV | 324 | 0.74 | |
| 21 | HARQLPGRLVGVSVDS | 293 | 0.74 | |
| 21 | ASMLDEGTAAAEAMTL | 146 | 0.74 | |
| 21 | TGLEIANASMLDEGTA | 139 | 0.74 | |
| 22 | LWRVDADHVSVACDEA | 410 | 0.73 | |
| 23 | LTAITSANYIARRLDE | 764 | 0.72 | |
| 23 | AKVGEHAERLSALMIT | 621 | 0.72 | |
| 23 | TGYDAVSLQPNAGSQG | 544 | 0.72 | |
| 23 | AVATMLAVIGVDSLDD | 18 | 0.72 | |
| 24 | KLTGITVDDVAKRLAD | 805 | 0.71 | |
| 24 | NALVGLARPGKFGGDV | 670 | 0.71 | |
| 24 | SALVQQAHDRGALVAV | 230 | 0.71 | |

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| 25 | HVAVVLDAFGVAAAAP | 430 | 0.70 |  |
| 25 | RAGLPDGEFFGVIAQL | 204 | 0.70 |  |
| 26 | RALADKDIALDRSMIP | 477 | 0.68 |  |
| 26 | ARRVHAHAEAIAGALG | 361 | 0.68 |  |
| 27 | DTLTDTGAAPGLDSLP | 45 | 0.67 |  |
| 27 | HAGYLAVHAKHARQLP | 283 | 0.67 |  |
| 28 | LARAKANGINLWRVDA | 400 | 0.66 |  |
| 28 | QGRLEALLNFQTLVTD | 122 | 0.66 |  |
| 29 | LAEVDAFCEAMIGIRA | 846 | 0.65 |  |
| 30 | SDHSTFADRHIGLDSQ | 2 | 0.64 |  |
| 30 | VFTQTAAVLATRAKPL | 179 | 0.64 |  |
| 31 | VLATRAKPLGIEIVTA | 186 | 0.63 |  |
| 32 | PSSAHGTNAASAALAG | 585 | 0.62 |  |
| 33 | PNAGSQGEYAGLLAIH | 553 | 0.61 |  |
| 34 | PGRADEVLARAKANGI | 393 | 0.60 |  |
| 34 | AHDRGALVAVGADLLA | 236 | 0.60 |  |
| 35 | LAELRALADANTVAVS | 69 | 0.56 |  |
| 35 | TSNICTAQVLLAVLAA | 331 | 0.56 |  |
| 35 | LVAVGADLLALTLIAP | 242 | 0.56 |  |

# OVERLAP DISPLAY

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VSDHSTFADRHIGLDSQAVATMLAVIGVDSLDDLAVKAVPAGILDTLTDTGAAPGLDSLPPAASEAEALAELRALADANTVAV
SMIGQGYYDTHTPPVLLRNIIENPAWYTAYTPYQPEISQGRLEALLNFQTLVTDLTGLEIANASMLDEGTAAAEAMTLMHRAA
RGPVKRVVVDADVFTQTAAVLATRAKPLGIEIVTADLRAGLPDGEFFGVIAQLPGASGRITDWSALVQQAHDRGALVAVGADL
LALTLIAPPGEIGADVAFGTTQRFGVPMGFGGPHAGYLAVHAKHARQLPGRLVGVSVDSDGTPAYRLALQTREQHIRRDKATS
NICTAQVLLAVLAAMYASYHGAGGLTAIARRVHAHAEAIAGALGDALVHDKYFDTVLARVPGRADEVLARAKANGINLWRVDA
DHVSVACDEATTDTHVAVVLDAFGVAAAAPAHTDIATRTSEFLTHPAFTQYRTETSMMRYLRALADKDIALDRSMIPLGSCTM
KLNAAAEMESITWPEFGRQHPFAPASDTAGLRQLVADLQSWLVLITGYDAVSLQPNAGSQGEYAGLLAIHEYHASRGEPHRDI
CLIPSSAHGTNAASAALAGMRVVVVDCHDNGDVDLDDLRAKVGEHAERLSALMITYPSTHGVYEHDIAEICAAVHDAGGQVYV
DGANLNALVGLARPGKFGGDVSHLNLHKTFCIPHGGGGPGVGPVAVRAHLAPFLPGHPFAPELPKGYPVSSAPYGSASILPIT
WAYIRMMGAEGLRAASLTAITSANYIARRLDEYYPVLYTGENGMVAHECILDLRGITKLTGITVDDVAKRLADYGFHAPTMSF
PVAGTLMVEPTESESLAEVDAFCEAMIGIRAEIDKVGAGEWPVDDNPLRGAPHTAQCLLASDWDHPYTREQAAYPLGTAFRPK
VWPAVRRIDGAYGDRNLVCSCPPVEAFA941
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