

Resource Summary Report

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BciPep

RRID:SCR_007559

Type: Tool

Proper Citation

BciPep (RRID:SCR_007559)

Resource Information

URL: <http://bioinformatics.uams.edu/mirror/bcipep/>

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Description: Bcipep is collection of the peptides having the role in humoral immunity. The peptides in the database have varying measure of immunogenicity. This database can assist in the development of methods for predicting B cell epitopes, designing synthetic vaccines, and in disease diagnosis. These peptides lead to the generation of antibodies which combine with antigens and are responsible for the host defense, and can be very useful for subunit vaccine designing. The database has 3031 peptide entries. For each peptide, the user can find a plethora of information, including entry number, peptide sequence, pathogen group, protein source, antigen structure, antibody, etc.

Synonyms: BciPep

Resource Type: data or information resource, database

Keywords: antibody, antigen, antigen structure, b cell, b cell epitope, b cell receptor, bcr, humoral immunity, ig, vaccine

Resource Name: BciPep

Resource ID: SCR_007559

Alternate IDs: nif-0000-02597

Record Creation Time: 20220129T080242+0000

Record Last Update: 20260905T133140+0000

Ratings and Alerts

No rating or validation information has been found for BciPep.

No alerts have been found for BciPep.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 15 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Hu RS, et al. (2025) Transformer-based deep learning enables improved B-cell epitope prediction in parasitic pathogens: A proof-of-concept study on *Fasciola hepatica*. PLoS neglected tropical diseases, 19(4), e0012985.

Almofti YA, et al. (2025) Exploring varicella zoster virus proteome for construction and validation of a multi-epitope based subunit vaccine using multifaceted immunoinformatics approaches. PloS one, 20(6), e0324453.

Mahafujul Alam SS, et al. (2025) Immunoinformatics based designing of a multi-epitope cancer vaccine targeting programmed cell death ligand 1. Scientific reports, 15(1), 12420.

Sethi G, et al. (2024) Immunoinformatics and structural aided approach to develop multi-epitope based subunit vaccine against *Mycobacterium tuberculosis*. Scientific reports, 14(1), 15923.

Liu F, et al. (2024) Prediction of linear B-cell epitopes based on protein sequence features and BERT embeddings. Scientific reports, 14(1), 2464.

da Silva BM, et al. (2023) epitope1D: accurate taxonomy-aware B-cell linear epitope prediction. Briefings in bioinformatics, 24(3).

Farriol-Duran R, et al. (2023) Brewpitopes: a pipeline to refine B-cell epitope predictions during public health emergencies. Frontiers in immunology, 14, 1278534.

Mahmoud NA, et al. (2022) A novel strategy for developing vaccine candidate against Jaagsiekte sheep retrovirus from the envelope and gag proteins: an in-silico approach. BMC veterinary research, 18(1), 343.

Bou Zerdan M, et al. (2021) Mechanisms of Immunotoxicity: Stressors and Evaluators. International journal of molecular sciences, 22(15).

Sanches RCO, et al. (2021) Immunoinformatics Design of Multi-Epitope Peptide-Based Vaccine Against *Schistosoma mansoni* Using Transmembrane Proteins as a Target. Frontiers in immunology, 12, 621706.

Abduljaleel Z, et al. (2021) Peptides-based vaccine against SARS-nCoV-2 antigenic fragmented synthetic epitopes recognized by T cell and ?-cell initiation of specific antibodies to fight the infection. Bio-design and manufacturing, 4(3), 490.

Bahai A, et al. (2021) EpitopeVec: linear epitope prediction using deep protein sequence embeddings. *Bioinformatics (Oxford, England)*, 37(23), 4517.

Kar PP, et al. (2018) Immuno-informatics Analysis to Identify Novel Vaccine Candidates and Design of a Multi-Epitope Based Vaccine Candidate Against *Theileria* parasites. *Frontiers in immunology*, 9, 2213.

Charoentong P, et al. (2012) Bioinformatics for cancer immunology and immunotherapy. *Cancer immunology, immunotherapy : CII*, 61(11), 1885.

Galperin MY, et al. (2005) The Molecular Biology Database Collection: 2005 update. *Nucleic acids research*, 33(Database issue), D5.