

Resource Summary Report

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ToxinPred

RRID:SCR_018542

Type: Tool

Proper Citation

ToxinPred (RRID:SCR_018542)

Resource Information

URL: <http://crdd.osdd.net/raghava/toxinpred/>

Proper Citation: ToxinPred (RRID:SCR_018542)

Description: Software package for peptides designing and prediction. In silico approach for predicting toxicity of peptides and proteins. Used for predicting peptide toxicity or non toxicity, minimum mutations in peptides for increasing or decreasing their toxicity, toxic regions in proteins.

Resource Type: service resource, software toolkit, software resource, production service resource, analysis service resource

Defining Citation: [PMID:29300301](#)

Keywords: Toxin, toxicity, toxicity prediction, peptide toxicity prediction, peptide design, protein, peptide mutation, toxic region, protein toxic region

Funding: Department of Biotechnology Govt. of India ;
Council of Scientific and Industrial Research Govt. of India

Availability: Free, Freely available

Resource Name: ToxinPred

Resource ID: SCR_018542

Record Creation Time: 20220129T080340+0000

Record Last Update: 20260731T043036+0000

Ratings and Alerts

No rating or validation information has been found for ToxinPred.

No alerts have been found for ToxinPred.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 161 mentions in open access literature.

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

Pasha AVK, et al. (2026) Immunoinformatics-Based Multi-Epitope Vaccine Targeting Helicobacter Pylori. Cancer reports (Hoboken, N.J.), 9(1), e70441.

Manzanilla-Valdez ML, et al. (2025) Antioxidant, Hypotensive, and Antidiabetic Breakthroughs: Bromelain Hydrolysis Unlocks Quinoa's Peptide Potential - In Silico and In Vitro Approach. Journal of agricultural and food chemistry, 73(36), 22877.

Bilal A, et al. (2025) Characterization of multi-targeted insulin-mimetic antidiabetic peptides using in silico approaches. PloS one, 20(8), e0330341.

Sadeghi SA, et al. (2025) Immunoinformatics study of CD40 ligand-targeting vaccine constructs: a novel immunotherapeutic approach. Osong public health and research perspectives, 16(4), 311.

Parvin R, et al. (2025) Designing of a multiepitope-based vaccine against echinococcosis utilizing the potent Ag5 antigen: Immunoinformatics and simulation approaches. PloS one, 20(2), e0310510.

Mishra SK, et al. (2025) Exploratory algorithms to devise multi-epitope subunit vaccine by examining HIV-1 envelope glycoprotein: An immunoinformatics and viroinformatics approach. PloS one, 20(2), e0318523.

da Cruz Freire JE, et al. (2025) Molecular and Immunological Properties of a Chimeric Glycosyl Hydrolase 18 Based on Immunoinformatics Approaches: A Design of a New Anti-Leishmania Vaccine. ACS pharmacology & translational science, 8(1), 78.

Moosavi-Kohnehsari RS, et al. (2025) A new vaccination approach for Salmonellosis employing a multi-epitope vaccine based on live microbial cell factory from Lactococcus lactis. Poultry science, 104(2), 104789.

Lyapina AM, et al. (2025) Humoral Response in Cattle Vaccinated with the Heterologous Sheeppox Virus Vaccine for Protection Against Lumpy Skin Disease: A Field Study. Vaccines, 13(12).

Wang J, et al. (2025) Multi-Epitope-Based Peptide Vaccine Against Bovine Parainfluenza Virus Type 3: Design and Immunoinformatics Approach. Veterinary sciences, 12(11).

Souod N, et al. (2025) In silico design and evaluation of a multiepitope vaccine against Bordetella pertussis: structural, immunological, and biological properties. Genomics &

informatics, 23(1), 16.

Zafar S, et al. (2025) Molecular dynamics simulation based prediction of T-cell epitopes for the production of effector molecules for liver cancer immunotherapy. PloS one, 20(1), e0309049.

Mosalanejad Z, et al. (2025) Designing an optimized theta-defensin peptide for HIV therapy using in-silico approaches. Journal of integrative bioinformatics, 22(1).

Kumar A, et al. (2025) Protocol for designing a peptide-based multi-epitope vaccine targeting monkeypox using reverse vaccine technology. STAR protocols, 6(1), 103671.

Basmenj ER, et al. (2025) Computational epitope-based vaccine design with bioinformatics approach; a review. Heliyon, 11(1), e41714.

Mashrur MN, et al. (2025) In silico design of novel multi-epitope peptide vaccine against Neospora caninum induced cattle abortion targeting extracellular GRA2 and Nc-p43 protein. Scientific reports, 15(1), 42169.

Mochná?ová E, et al. (2025) Antimicrobial cyclic peptides effectively inhibit multiple forms of Borrelia and cross the blood-brain barrier model. Scientific reports, 15(1), 6147.

Patil SM, et al. (2025) Protocol for isolation, fractionation, and system biology-based profiling of gastrointestinal digested dairy colostrum and milk proteome. STAR protocols, 6(1), 103657.

Nahian M, et al. (2025) Immunoinformatic strategy for developing multi-epitope subunit vaccine against Helicobacter pylori. PloS one, 20(2), e0318750.

Shu Z, et al. (2025) Enhancement of Apostichopus japonicus peptide flavor through bacterial and enzyme co-fermentation (BECF) and the identification of novel antioxidant peptides in the fermented product. Food chemistry: X, 27, 102323.