

Resource Summary Report

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Phobius

RRID:SCR_015643

Type: Tool

Proper Citation

Phobius (RRID:SCR_015643)

Resource Information

URL: <http://phobius.sbc.su.se/>

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Description: Web application for combined transmembrane topology and signal peptide prediction. Used for whole genome annotation of signal peptides and transmembrane regions. Predictor is based on hidden Markov model (HMM) that models different sequence regions of signal peptide and different regions of transmembrane protein in series of interconnected states.

Synonyms: PHOBIUS

Resource Type: production service resource, software resource, service resource, data access protocol, analysis service resource, web service

Defining Citation: [PMID:15111065](#), [PMID:30976793](#)

Keywords: Signal peptide prediction, whole genome annotation, transmembrane region, protein prediction, transmembrane topology, signal peptide, fasta, hidden markov model

Funding:

Availability: Freely Available, Free, Available for download

Resource Name: Phobius

Resource ID: SCR_015643

Alternate IDs: SCR_018767

Alternate URLs: <http://phobius.binf.ku.dk/>, <https://www.ebi.ac.uk/Tools/pfa/phobius/>

Record Creation Time: 20220129T080326+0000

Record Last Update: 20250428T053927+0000

Ratings and Alerts

No rating or validation information has been found for Phobius.

No alerts have been found for Phobius.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 468 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

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

Ren BR, et al. (2025) Optimizing encephalomyocarditis virus VP1 protein assembly on pseudorabies virus envelope via US9 protein anchoring. Virulence, 16(1), 2445235.

Kusumoto K, et al. (2025) Multispanning membrane protein SIDT2 increases knockdown activity of gapmer antisense oligonucleotides. Scientific reports, 15(1), 586.

Donato A, et al. (2025) OSP-1 protects neurons from autophagic cell death induced by acute oxidative stress. Nature communications, 16(1), 300.

Tse-Kang SY, et al. (2024) Intestinal immunity in *C. elegans* is activated by pathogen effector-triggered aggregation of the guard protein TIR-1 on lysosome-related organelles. Immunity, 57(10), 2280.

Brown E, et al. (2024) Inhibitors of the small membrane (M) protein viroporin prevent Zika virus infection. eLife, 13.

Soulé S, et al. (2024) The root-knot nematode effector MiEFF12 targets the host ER quality control system to suppress immune responses and allow parasitism. Molecular plant pathology, 25(7), e13491.

Zhao Y, et al. (2024) Membrane RRM2-positive cells represent a malignant population with

cancer stem cell features in intrahepatic cholangiocarcinoma. *Journal of experimental & clinical cancer research* : CR, 43(1), 255.

Yoon KW, et al. (2024) Vaccine efficacy induced by virus-like particles containing *Leishmania donovani* surface glycoprotein GP63. *PLoS neglected tropical diseases*, 18(6), e0012229.

Liu Z, et al. (2024) Retrotransposon-mediated disruption of a chitin synthase gene confers insect resistance to *Bacillus thuringiensis* Vip3Aa toxin. *PLoS biology*, 22(7), e3002704.

Martin J, et al. (2024) Highly Resolved Genomes of Two Closely Related Lineages of the Rodent Louse *Polyplax serrata* with Different Host Specificities. *Genome biology and evolution*, 16(3).

Serra Moncadas L, et al. (2024) Freshwater genome-reduced bacteria exhibit pervasive episodes of adaptive stasis. *Nature communications*, 15(1), 3421.

Hoffman T, et al. (2024) Pro-SMP finder-A systematic approach for discovering small membrane proteins in prokaryotes. *PloS one*, 19(2), e0299169.

Kuhn CK, et al. (2024) The repertoire and structure of adhesion GPCR transcript variants assembled from publicly available deep-sequenced human samples. *Nucleic acids research*, 52(7), 3823.

Chu X, et al. (2024) A unique cell division protein critical for the assembly of the bacterial divisome. *eLife*, 12.

Nakonieczna A, et al. (2024) New bacteriophage-derived lysins, LysJ and LysF, with the potential to control *Bacillus anthracis*. *Applied microbiology and biotechnology*, 108(1), 76.

Charneau S, et al. (2024) APEX2-based proximity proteomic analysis identifies candidate interactors for *Plasmodium falciparum* knob-associated histidine-rich protein in infected erythrocytes. *Scientific reports*, 14(1), 11242.

Wu Z, et al. (2024) Genomic and transcriptomics analysis reveal putative secreted proteins expressed of *Pasteurella multocida* during 18 β -glycyrrhetic acid treatment. *Frontiers in veterinary science*, 11, 1495924.

Leal-Dutra CA, et al. (2024) Genomic Signatures of Domestication in a Fungus Obligately Farmed by Leafcutter Ants. *Molecular biology and evolution*, 41(10).

Wang C, et al. (2024) *Colletotrichum fructicola* co-opts cytotoxic ribonucleases that antagonize host competitive microorganisms to promote infection. *mBio*, 15(8), e0105324.