Resource Summary Report

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CCTOP

RRID:SCR_016963
Type: Tool

Proper Citation

CCTOP (RRID:SCR_016963)

Resource Information

URL: http://cctop.enzim.ttk.mta.hu/

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Description: Web application providing transmembrane topology prediction. Server incorporates topology information from existing experimental and computational sources using the probabilistic framework of hidden Markov model. Provides the option to precede the topology prediction with signal peptide prediction and transmembrane globular protein discrimination. Given the amino acid sequence of a putative ? helical transmembrane protein, CCTOP predicts its topology i.e. localization of membrane spanning regions and orientation of segments between them.

Abbreviations: CCTOP

Synonyms: CCTOP, Consensus Constrained TOPology

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

Defining Citation: PMID:25943549

Keywords: transmembrane, topology, prediction, signal, peptide, globular, protein, discrimination, amino, acid, sequence, region, orientation, segment, bio.tools

Funding: Hungarian Scientific Research Fund

Availability: Free, Freely available

Resource Name: CCTOP

Resource ID: SCR_016963

Alternate IDs: biotools:cctop

Alternate URLs: https://bio.tools/cctop

Record Creation Time: 20220129T080332+0000

Record Last Update: 20250420T014822+0000

Ratings and Alerts

No rating or validation information has been found for CCTOP.

No alerts have been found for CCTOP.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 29 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

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

Feng Q, et al. (2024) CRISPR technology in human diseases. MedComm, 5(8), e672.

Pernis M, et al. (2023) Secretome analysis revealed that cell wall remodeling and starch catabolism underlie the early stages of somatic embryogenesis in Pinus nigra. Frontiers in plant science, 14, 1225424.

Baden P, et al. (2023) Glucocerebrosidase is imported into mitochondria and preserves complex I integrity and energy metabolism. Nature communications, 14(1), 1930.

Tsunoda T, et al. (2022) ENTREP/FAM189A2 encodes a new ITCH ubiquitin ligase activator that is downregulated in breast cancer. EMBO reports, 23(2), e51182.

Cui J, et al. (2022) Consensus mutagenesis and computational simulation provide insight into the desaturation catalytic mechanism for delta 6 fatty acid desaturase. Biochemical and biophysical research communications, 586, 74.

Heged?s T, et al. (2022) Ins and outs of AlphaFold2 transmembrane protein structure

predictions. Cellular and molecular life sciences : CMLS, 79(1), 73.

Aaltonen MJ, et al. (2022) Serine palmitoyltransferase assembles at ER-mitochondria contact sites. Life science alliance, 5(2).

Tapia RR, et al. (2021) Evolution of the MLO gene families in octoploid strawberry (Fragaria ×ananassa) and progenitor diploid species identified potential genes for strawberry powdery mildew resistance. Horticulture research, 8(1), 153.

Pyc M, et al. (2021) LDIP cooperates with SEIPIN and LDAP to facilitate lipid droplet biogenesis in Arabidopsis. The Plant cell, 33(9), 3076.

Santerre M, et al. (2021) Why do SARS-CoV-2 NSPs rush to the ER? Journal of neurology, 268(6), 2013.

Jensen BC, et al. (2021) Unusual features and localization of the membrane kinome of Trypanosoma brucei. PloS one, 16(10), e0258814.

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.

Ibarrola-Vannucci AK, et al. (2021) Characterization and functional analysis of the proteins Prohibitin 1 and 2 in Trypanosoma cruzi. PLoS neglected tropical diseases, 15(4), e0009322.

Lu MX, et al. (2021) Identification and physiological function of CsPrip, a new aquaporin in Chilo suppressalis. International journal of biological macromolecules, 184, 721.

ElBanna SA, et al. (2021) Genomics-guided identification of a conserved CptBA-like toxin-antitoxin system in Acinetobacter baumannii. Journal of advanced research, 30, 159.

Matalin DA, et al. (2021) Cloning and Characterization of Two Putative P-Type ATPases from the Marine Microalga Dunaliella maritima Similar to Plant H+-ATPases and Their Gene Expression Analysis under Conditions of Hyperosmotic Salt Shock. Plants (Basel, Switzerland), 10(12).

Tang L, et al. (2021) Overexpression of OsLCT2, a Low-Affinity Cation Transporter Gene, Reduces Cadmium Accumulation in Shoots and Grains of Rice. Rice (New York, N.Y.), 14(1), 89.

Cappele J, et al. (2021) Structural and Biochemical Analysis of OrfG: The VirB8-like Component of the Conjugative Type IV Secretion System of ICESt3 From Streptococcus thermophilus. Frontiers in molecular biosciences, 8, 642606.

Tsukamoto S, et al. (2020) The Caenorhabditis elegans INX-4/Innexin is required for the fine-tuning of temperature orientation in thermotaxis behavior. Genes to cells : devoted to molecular & cellular mechanisms, 25(3), 154.