Resource Summary Report

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BOMP: beta-barrel Outer Membrane protein Predictor

RRID:SCR_007268 Type: Tool

Proper Citation

BOMP: beta-barrel Outer Membrane protein Predictor (RRID:SCR_007268)

Resource Information

URL: http://www.bioinfo.no/tools/bomp

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Description: BOMP is a tool for prediction of beta-barrel integral outer membrane proteins. The user may submit a list of proteins, and receive a list of predicted BOMPs. The program, called the beta-barrel Outer Membrane protein Predictor (BOMP), is based on two separate components to recognize integral beta-barrel proteins. The first component is a C-terminal pattern typical of many integral beta-barrel proteins. The second component calculates an integral beta-barrel score of the sequence based on the extent to which the sequence contains stretches of amino acids typical of transmembrane -strands. To use the BOMP tool simply paste your fasta-formatted sequences into the text area, or choose a file which contains sequences. Then hit the submit button. It is possible to perform a BLAST search parallel with the predictions, which may be suitable in some cases. Using the BLAST search will however increase the running time substantially. Sponsors: This work was supported in part by grants from the Norwegian Research Council [SUP 140785/420 (GABI); FUGE/CBU151899/ISO], and the Meltzer Foundation, University of Bergen. Keywords: Beta-barrel, Membrane, Protein, Program, Software, Beta strand, Bacteria,

Synonyms: BOMP Program

Resource Type: software resource, software application

Keywords: bio.tools

Funding:

Resource Name: BOMP: beta-barrel Outer Membrane protein Predictor

Resource ID: SCR_007268

Alternate IDs: biotools:bomp, nif-0000-30236

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

Record Creation Time: 20220129T080240+0000

Record Last Update: 20250421T053617+0000

Ratings and Alerts

No rating or validation information has been found for BOMP: beta-barrel Outer Membrane protein Predictor.

No alerts have been found for BOMP: beta-barrel Outer Membrane protein Predictor.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 5 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

Hui X, et al. (2021) Computational prediction of secreted proteins in gram-negative bacteria. Computational and structural biotechnology journal, 19, 1806.

Wu X, et al. (2016) FmvB: A Francisella tularensis Magnesium-Responsive Outer Membrane Protein that Plays a Role in Virulence. PloS one, 11(8), e0160977.

Yan RX, et al. (2011) Outer membrane proteins can be simply identified using secondary structure element alignment. BMC bioinformatics, 12, 76.

Pieper R, et al. (2011) Characterizing the Escherichia coli O157:H7 proteome including protein associations with higher order assemblies. PloS one, 6(11), e26554.

Pieper R, et al. (2009) Integral and peripheral association of proteins and protein complexes with Yersinia pestis inner and outer membranes. Proteome science, 7, 5.