

Resource Summary Report

Generated by SPARC SAWG on Sep 13, 2026

?G prediction server

RRID:SCR_018191

Type: Tool

Proper Citation

?G prediction server (RRID:SCR_018191)

Resource Information

URL: <http://dgpred.cbr.su.se/>

Proper Citation: ?G prediction server (RRID:SCR_018191)

Description: Web server to predict ?Gapp for membrane insertion of potential TM helix. Given amino acid sequence of putative transmembrane helix, server gives prediction of corresponding apparent free energy difference for insertion of this sequence into Endoplasmic Reticulum membrane by means of Sec61 translocon.

Synonyms: ?G prediction server v1.0

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

Keywords: Amino acid sequence, putative transmembrane helix, free energy difference, sequence insertion, endoplasmic reticulum membrane, potential TM helix, predict energy difference, bio.tools

Availability: Free, Freely available

Resource Name: ?G prediction server

Resource ID: SCR_018191

Alternate IDs: biotools:deltag_prediction

Alternate URLs: <http://dgpred.cbr.su.se/index.php?p=TMPred>,
https://bio.tools/deltag_prediction

Record Creation Time: 20220129T080339+0000

Record Last Update: 20260912T195858+0000

Ratings and Alerts

No rating or validation information has been found for ?G prediction server.

No alerts have been found for ?G prediction server.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 17 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Wu H, et al. (2026) Design principles of human membrane protein topology. The Journal of cell biology, 225(8).

Kotan IE, et al. (2026) SRP orchestrates protein biogenesis beyond initial ER membrane targeting. Nature communications, 17(1).

Zimmermann R, et al. (2025) Rules of Engagement for Components of Membrane Protein Biogenesis at the Human Endoplasmic Reticulum. International journal of molecular sciences, 26(18).

Hsieh LT, et al. (2025) The Mycobacterium ulcerans toxin mycolactone causes destructive Sec61-dependent loss of the endothelial glycocalyx and vessel basement membrane to drive skin necrosis. eLife, 12.

Chang J, et al. (2025) Endocytic recycling is central to circadian collagen fibrillogenesis and disrupted in fibrosis. eLife, 13.

Jung M, et al. (2023) Quantitative Mass Spectrometry Characterizes Client Spectra of Components for Targeting of Membrane Proteins to and Their Insertion into the Membrane of the Human ER. International journal of molecular sciences, 24(18).

Hsieh LT, et al. (2023) Mycolactone causes catastrophic Sec61-dependent loss of the endothelial glycocalyx and basement membrane: a new indirect mechanism driving tissue necrosis in Mycobacterium ulcerans infection. bioRxiv : the preprint server for biology.

Duart G, et al. (2022) Intra-Helical Salt Bridge Contribution to Membrane Protein Insertion. Journal of molecular biology, 434(5), 167467.

Lang S, et al. (2022) Signal Peptide Features Determining the Substrate Specificities of Targeting and Translocation Components in Human ER Protein Import. Frontiers in physiology, 13, 833540.

Roushar FJ, et al. (2022) Molecular basis for variations in the sensitivity of pathogenic rhodopsin variants to 9-cis-retinal. The Journal of biological chemistry, 298(8), 102266.

O'Keefe S, et al. (2021) An alternative pathway for membrane protein biogenesis at the endoplasmic reticulum. *Communications biology*, 4(1), 828.

Huang H, et al. (2021) Disease-linked supertrafficking of a potassium channel. *The Journal of biological chemistry*, 296, 100423.

McKee AG, et al. (2021) Systematic profiling of temperature- and retinal-sensitive rhodopsin variants by deep mutational scanning. *The Journal of biological chemistry*, 297(6), 101359.

Chamness LM, et al. (2021) Molecular basis for the evolved instability of a human G-protein coupled receptor. *Cell reports*, 37(8), 110046.

Klein MC, et al. (2020) TRAM1 protein may support ER protein import by modulating the phospholipid bilayer near the lateral gate of the Sec61-channel. *Channels (Austin, Tex.)*, 14(1), 28.

Duart G, et al. (2020) SARS-CoV-2 envelope protein topology in eukaryotic membranes. *Open biology*, 10(9), 200209.

Harrington HR, et al. (2020) Cotranslational folding stimulates programmed ribosomal frameshifting in the alphavirus structural polyprotein. *The Journal of biological chemistry*, 295(20), 6798.