Resource Summary Report

Generated by RRID on Apr 28, 2025

PRED-GPCR

RRID:SCR_006196

Type: Tool

Proper Citation

PRED-GPCR (RRID:SCR_006196)

Resource Information

URL: http://athina.biol.uoa.gr/bioinformatics/PRED-GPCR/

Proper Citation: PRED-GPCR (RRID:SCR_006196)

Description: A prediction tool for GPCR Family Classification from sequence alone based on a probabilistic method that uses family-specific profile Hidden Markov Models. The PRED-GPCR system is based on a probabilistic method that uses family specific profile HMMs in order to determine to which GPCR family a query sequence belongs or resembles. The approach proposed in this method exploits the descriptive power of profile HMMs along with an exhaustive discrimination assessment method to select only highly selective and sensitive profiles, for each family. The collection of these profiles constitutes a signature library, which is scanned, for significant matches with a given query sequence. The output report for a query sequence consists of two sections: * A ranked list of the profile HMM matches, below the selected individual motif E-value cutoff, along with their corresponding family. * A ranked list of the Combined P-values, E-values as well as the number of profiles matched for each family. To cross-evaluate your results you can browse through Swiss-Prot, Trembl, Pfam and Prosite family related entries.

Abbreviations: PRED-GPCR

Synonyms: PRED-GPCR: GPCRs Family classification from sequence alone

Resource Type: production service resource, data analysis service, service resource, data

set, analysis service resource, data or information resource

Defining Citation: PMID:15215415

Keywords: g-protein coupled receptor, classification, hidden markov model, sequence, fasta, family classification, motif, bio.tools

Funding:

Availability: Free

Resource Name: PRED-GPCR

Resource ID: SCR_006196

Alternate IDs: nlx_151741, biotools:pred-gpcr

Alternate URLs: https://bio.tools/pred-gpcr

Record Creation Time: 20220129T080234+0000

Record Last Update: 20250428T053217+0000

Ratings and Alerts

No rating or validation information has been found for PRED-GPCR.

No alerts have been found for PRED-GPCR.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID.

Kay J, et al. (2011) The aspartic proteinase family of three Phytophthora species. BMC genomics, 12, 254.

Gookin TE, et al. (2008) Whole proteome identification of plant candidate G-protein coupled receptors in Arabidopsis, rice, and poplar: computational prediction and in-vivo protein coupling. Genome biology, 9(7), R120.