Resource Summary Report

Generated by RRID on Apr 28, 2025

MIPModDB

RRID:SCR_006058
Type: Tool

Proper Citation

MIPModDB (RRID:SCR_006058)

Resource Information

URL: http://bioinfo.iitk.ac.in/MIPModDB/

Proper Citation: MIPModDB (RRID:SCR_006058)

Description: This is a database of comparative protein structure models of MIP (Major Intrinsic Protein) family of proteins. The nearly completed sets of MIPs have been identified from the completed genome sequence of organisms available at NCBI. The structural models of MIP proteins were created by defined protocol. The database aims to provide key information of MIPs in particular based on sequence as well as structures. This will further help to decipher the function of uncharacterized MIPs. For each MIP entry, this database contains information about the source, gene structure, sequence features, substitutions in the conserved NPA motifs, structural model, the residues forming the selectivity filter and channel radius profile. For selected set of MIPs, it is possible to derive structure-based sequence alignment and evolutionary relationship. Sequences and structures of selected MIPs can be downloaded from MIPModDB database.

Abbreviations: MIPModDB

Synonyms: Major Intrinsic Protein superfamily Models, MIPModDB - Major Intrinsic Protein superfamily Models

Resource Type: database, data or information resource

Defining Citation: PMID:22080560

Keywords: major intrinsic protein, model, protein structure, structural model, sequence, structure, superfamily, genome sequence, amino acid sequence, motif, bio.tools

Funding: Government of India

Availability: Free

Resource Name: MIPModDB

Resource ID: SCR_006058

Alternate IDs: nlx_151460, biotools:mipmoddb

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

Record Creation Time: 20220129T080234+0000

Record Last Update: 20250428T053211+0000

Ratings and Alerts

No rating or validation information has been found for MIPModDB.

No alerts have been found for MIPModDB.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Dande R, et al. (2023) dbAQP-SNP: a database of missense single-nucleotide polymorphisms in human aquaporins. Database : the journal of biological databases and curation, 2023.

Vajpai M, et al. (2018) Cooperativity in Plant Plasma Membrane Intrinsic Proteins (PIPs): Mechanism of Increased Water Transport in Maize PIP1 Channels in Hetero-tetramers. Scientific reports, 8(1), 12055.

Chen G, et al. (2017) Functional characterization of an aquaporin from a microsporidium, Nosema bombycis. PloS one, 12(7), e0181703.

Verma RK, et al. (2015) Major intrinsic protein superfamily: channels with unique structural features and diverse selectivity filters. Methods in enzymology, 557, 485.

Lane J, et al. (2014) Control elements targeting Tgfb3 expression to the palatal epithelium are located intergenically and in introns of the upstream Ift43 gene. Frontiers in physiology,

5, 258.

Verma RK, et al. (2014) New subfamilies of major intrinsic proteins in fungi suggest novel transport properties in fungal channels: implications for the host-fungal interactions. BMC evolutionary biology, 14, 173.