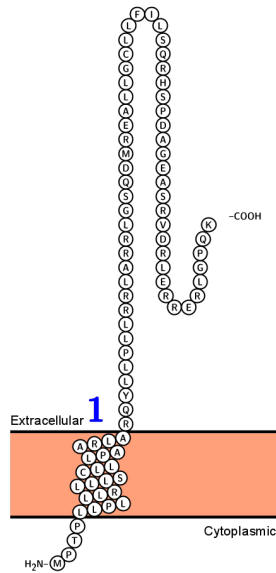


# Protein myomixer

Organism: Homo sapiens (Human) | Gene names: MYMX



Entry: A0A1B0GTQ4

Mass: 9.607 Da

Transmembrane: 1

Subcellular location: Cell membrane

{ECO:0000250|UniProtKB:Q2Q5T5}, Single-pass

membrane protein {ECO:0000250|UniProtKB:Q2Q5T5}.

Cofactor: -

Extinction coefficient: 0.168

Isoelectric Point: 11.45

PubMed ID: 14574404, 28569745

Family: -

## Function:

Myoblast-specific protein that mediates myoblast fusion, an essential step for the formation of multi-nucleated muscle fibers. Involved in membrane fusion downstream of the lipid mixing step mediated by MYMK. Acts by generating membrane stresses via its extracellular C-terminus, leading to drive fusion pore formation. Acts independently of MYMK. Involved in skeletal muscle regeneration in response to injury by mediating the fusion of satellite cells, a population of muscle stem cells, with injured myofibers. {ECO:0000250|UniProtKB:Q2Q5T5}.

## Data from experiment(s): Hek293 membrane pellets

DIBMA 10	No data	DIBMA 12	No data
DIBMA Glycerol	No data	DIBMA Glucosamine	No data
Amphipol 17	No data	Amphipol 18	No data
AASTY 6-45	No data	AASTY 11-45	No data
AASTY 6-50	No data	AASTY 11-50	No data
AASTY 6- 55	No data	AASTY 11- 55	No data
SMALP 502-E	No data	SMALP 140-I	No data
SMALP 300	No data	SMALP 200	No data
SMALP 140	No data	DDM	No data
DM	No data	LMNG	No data
Fos-12	No data	Digitonin-A	No data
RIPA	No data		

Data from experiment(s): Hek293 membrane pellets 1 %

DIBMA 10	No data	DIBMA 12	No data
DIBMA Glycerol	No data	DIBMA Glucosamine	No data
Amphipol 17	No data	Amphipol 18	No data
AASTY 6-45	No data	AASTY 11-45	No data
AASTY 6-50	No data	AASTY 11-50	No data
AASTY 6- 55	No data	AASTY 11- 55	No data
SMALP 502-E	No data	SMALP 140-I	No data
SMALP 300	No data	SMALP 200	No data
SMALP 140	No data	DDM	No data
DM	No data	LMNG	No data
Fos-12	No data	Digitonin-A	No data
RIPA	No data		

Involvement in disease:

-

Binding site:

-

Tissue specificity:

-

3D (X-ray crystallography):

-

Pharmaceutical use:

-

AS sequence:

MPTPLLPLLLRLLLSCLLLPAARLARQYLLPLLRRRLARRLGSQDMREALLGCLLFILSQRHSPDAGEASRVDRLEERRERLGPQK

**Creditnotes:**

The protein visualizations are generated with the help of Protter:

Omasits, U., Ahrens, C.H., MÄ¼ller, S., Wollscheid, B. "Protter: interactive protein feature visualization and integration with experimental proteomic data". *Bioinformatics*. 2014 Mar 15; **30**(6):884-6. doi: 10.1093/bioinformatics/btt607.

IP and extinction coefficients are gathered from Protparam by ExPASy:

Gasteiger, E., Hoogland, C., Gattiker, A., Duvaud, S., Wilkins, M.R., Appel, R.D., Bairoch, A. "Protein Identification and Analysis Tools on the ExPASy Server". (In) *John M. Walker (ed): The Proteomics Protocols Handbook*, Humana Press (2005). pp. 571-607

The basic knowledge is found on UniProt:

The UniProt Consortium. "UniProt: the universal protein knowledgebase in 2021". *Nucleic Acids Res.* **49**:D1 (2021)

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