

Product Information

MemDX™ Membrane Protein Human FXYP1 (FXYP domain containing ion transport regulator 1) Expressed *in vitro* E.coli expression system, Full Length of Mature Protein

Cat. No.: **MPX3670K**

This product is for research use only and is not intended for diagnostic use.

This product is a Human FXYP1 membrane protein expressed *in vitro* E.coli expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

FXYP1

Protein Length

Full Length of Mature Protein

Protein Class

Transport

TMD

1

Sequence

ESPKEHDPFTYDYQSLQIGGLVIAGILFILGILIVLSRRRCRCKFNQQQRTGEPDEEEGTFRSSIRRLSTRRR

Product Description

Expression Systems

in vitro E.coli expression system

Tag

10xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

FXYP1

Full Name

FXYP domain containing ion transport regulator 1

Introduction

This gene encodes a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXYP and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYP-domain containing ion transport regulator. Mouse FXYP5 has been termed RIC (Related to Ion Channel). FXYP2, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. FXYP1 (phospholemman), FXYP2 (gamma), FXYP3 (MAT-8), FXYP4 (CHIF), and FXYP5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXYP1 and FXYP2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. The protein encoded by this gene is a plasma membrane substrate for several kinases, including protein kinase A, protein kinase C, NIMA kinase, and myotonic dystrophy kinase. It is thought to form an ion channel or regulate ion channel activity. Transcript variants with different 5' UTR sequences have been described in the literature.

Alternative Names

FXYP1; PLM; phospholemman; sodium/potassium-transporting ATPase subunit FXYP1; FXYP domain containing ion transport regulator 1

Gene ID

[5348](#)

UniProt ID

[O00168](#)