

# **Product Information**

# MemDX™ Membrane Protein Human FXYD1 (FXYD domain containing ion transport regulator 1) for Antibody Discovery

Cat. No.: MP0910J

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

This product is a 8.3 kDa Human FXYD1 membrane protein expressed in HEK293T. 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**

FXYD1

# **Protein Length**

Full-length

# **Protein Class**

Ion Channels: Other, Transmembrane

# **Molecular Weight**

8.3 kDa

#### **TMD**

1

# Sequence

MASLGHILVFCVGLLTMAKAESPKEHDPFTYDYQSLQIGGLVIAGILFILGILIVLSRRCRCKFNQQQRT GEPDEEEGTFRSSIRRLSTRRR

# **Product Description**

#### **Expression Systems**

HEK293T

# Tag

C-Myc/DDK

#### **Form**

Liquid

#### **Purification**

Anti-DDK affinity column followed by conventional chromatography steps

# **Purity**

> 80% as determined by SDS-PAGE and Coomassie blue staining

#### Buffer

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

#### Storage

Store at +4°C for up to one week or several months at -80°C

#### **Target**

#### **Target Protein**

FXYD1

#### **Full Name**

FXYD 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 PFXYD and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYD-domain containing ion transport regulator. Mouse FXYD5 has been termed RIC (Related to Ion Channel). FXYD2, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. FXYD1 (phospholemman), FXYD2 (gamma), FXYD3 (MAT-8), FXYD4 (CHIF), and FXYD5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXYD1 and FXYD2), 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**

PLM

Gene ID

<u>5348</u>

**UniProt ID** 

O00168