

Product datasheet for SC121958

FXYD1 (NM 005031) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: FXYD1 (NM_005031) Human Untagged Clone

Tag: Tag Free FXYD1 Symbol:

Synonyms: PLM **Mammalian Cell**

Selection:

None

Vector: pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

>NCBI ORF sequence for NM_005031, the custom clone sequence may differ by one or more **Fully Sequenced ORF:**

nucleotides

ATGGCGTCTCTTGGCCACATCTTGGTTTTCTGTGTGGGTCTCCTCACCATGGCCAAGGCAGAAAGTCCAA AGGAACACGACCCGTTCACTTACGACTACCAGTCCCTGCAGATCGGAGGCCTCGTCATCGCCGGGATCCT CTTCATCCTGGGCATCCTCATCGTGCTGAGCAGAAGATGCCGGTGCAAGTTCAACCAGCAGCAGAGGAGCT GGGGAACCCGATGAAGAGGAGGGAACTTTCCGCAGCTCCATCCGCCGTCTGTCCACCCGCAGGCGGTAG

5' Read Nucleotide

Sequence:

AACACCGAGCCACTTTNNNNNNNTTNNNCCCCCCGGTCCAGAATTTGTNATACGACTCAT CCTCCAGGGACAATGGCGTCTCTTGGCCACATCTTGGTTTTCTGTGTGGGTCTCCTCACC ATGGCCAAGGCAGAAAGTCCAAAGGAACACGACCCGTTCACTTACGACTACCAGTCCCTG CAGATCGGAGGCCTCGTCATCGCCGGGATCCTCTTCATCCTGGGCATCCTCATCGTGCTG AGCAGAAGATGCCGGTGCAAGTTCAACCAGCAGCAGAGGACTGGGGAACCCGATGAAGAG GAGGGAACTTTCCGCAGCTCCATCCGCCGTCTGTCCACCCGCAGGCGGTAGAAACACCTG GAGCGATGGAATCCGGCCAGGACTCCCCTGGCACCTGACATCTCCCACGCTCCACCTGCG CGCCCACCGCCCCTCCGCCGNCCCTTCCCCAGCCCTGCCCGCAGACTCCCCCTGCCG TTTCCATAAAACAACCGGGGGGGTTTTTTTTGGAACCCCCCACAGGTTTTTTTGGTCGCG

>OriGene 5' read for NM_005031 unedited



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Restriction Sites: Notl-Notl

ACCN: NM 005031

Insert Size: 900 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 005031.3</u>, <u>NP 005022.2</u>

 RefSeq Size:
 547 bp

 RefSeq ORF:
 279 bp

 Locus ID:
 5348

 UniProt ID:
 000168

 Cytogenetics:
 19q13.12

Domains: ATP1G1_PLM_MAT8

Protein Families: Ion Channels: Other, Transmembrane



Gene Summary:

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. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (a) and variants b, c and d encode the same protein.