

Product datasheet for RC211575

FXYD1 (NM 021902) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: FXYD1 (NM_021902) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: FXYD1

Synonyms: PLM

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC211575 representing NM_021902

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCGTCTCTTGGCCACATCTTGGTTTTCTGTGTGGGTCTCCTCACCATGGCCAAGGCAGAAAGTCCAA AGGAACACGACCCGTTCACTTACGACTACCAGTCCCTGCAGATCGGAGGCCTCGTCATCGCCGGGATCCT CTTCATCCTGGGCATCCTCATCGTGCTGAGCAGAAGATGCCGGTGCAAGTTCAACCAGCAGCAGAGGACT GGGGAACCCGATGAAGAGGGGAACTTTCCGCAGCTCCATCCGCCGTCTGTCCACCCGCAGGCGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211575 representing NM_021902

Red=Cloning site Green=Tags(s)

MASLGHILVFCVGLLTMAKAESPKEHDPFTYDYQSLQIGGLVIAGILFILGILIVLSRRCRCKFNQQQRT

GEPDEEEGTFRSSIRRLSTRRR

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6107 a04.zip

Restriction Sites: Sgfl-Mlul



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

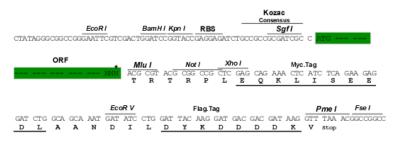
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_021902

ORF Size: 276 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

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 021902.4</u>

RefSeq Size: 558 bp RefSeq ORF: 279 bp Locus ID: 5348



 UniProt ID:
 000168

 Cytogenetics:
 19q13.12

Domains: ATP1G1_PLM_MAT8

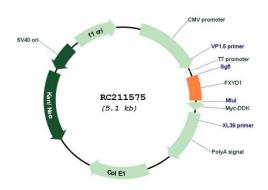
Protein Families: Ion Channels: Other, Transmembrane

MW: 8.3 kDa

Gene Summary:

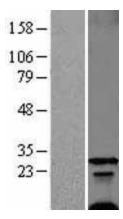
This gene encodes a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXYD and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYD-domain containing ion transport 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]

Product images:



Circular map for RC211575





Western blot validation of overexpression lysate (Cat# [LY402884]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211575 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).