

Product datasheet for MR220831

Fxyd2 (NM_052823) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Fxyd2 (NM_052823) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Fxyd2

Synonyms: Atp1g1

Mammalian Cell Neomycin

Selection:

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

ORF Nucleotide >MR220831 representing NM_052823

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

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGACAGGTGGTACCTGGGTGGCAGTGCCAAGGGGACAGAGAATCCCTTCGAGTACGACTATGAAACCGTCCGCAAAGGAGGCCTGATCTTCGCGGGCCTGGCCTTCGTCGTGGGCCTCCTCATCATCATCTCAGCAAAAG

GTTCCGCTGTGGGGGCGGTAAGAAACATAGGCAGGTCAATGAAGATGAACTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR220831 representing NM_052823

Red=Cloning site Green=Tags(s)

MDRWYLGGSAKGTENPFEYDYETVRKGGLIFAGLAFVVGLLIILSKRFRCGGGKKHRQVNEDEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9029 e07.zip

Restriction Sites: Sgfl-Mlul



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

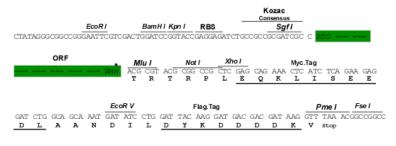
CN: techsupport@origene.cn

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_052823

ORF Size: 192 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 052823.3</u>

RefSeq Size: 632 bp RefSeq ORF: 195 bp



 Locus ID:
 11936

 UniProt ID:
 Q04646

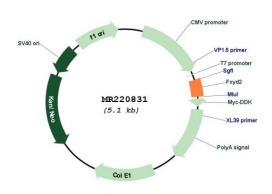
 Cytogenetics:
 9 A5.2

 MW:
 7.7 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 Type III integral membrane protein encoded by this gene is the gamma subunit of the Na,K-ATPase present on the plasma membrane. Although the Na,K-ATPase does not depend on the gamma subunit to be functional, it is thought that the gamma subunit modulates the enzyme's activity by inducing ion channel activity. Multiple transcript variants have been described for this gene that are expressed in tissue-specific and developmental stage-specific patterns and encode proteins that differ at the N-terminus. [provided by RefSeq, Sep 2009]

Product images:



Circular map for MR220831