

Product datasheet for MR200074L4V

OriGene Technologies, Inc.

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Fxyd2 (NM_007503) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Fxyd2 (NM_007503) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Fxyd2
Synonyms: Atp1g1

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_007503

ORF Size: 213 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR200074).

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 007503.3</u>, <u>NP 031529.2</u>

 RefSeq Size:
 569 bp

 RefSeq ORF:
 213 bp

 Locus ID:
 11936

 UniProt ID:
 Q04646

 Cytogenetics:
 9 A5.2





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]