

Product datasheet for **RN200369**

Fxyd2 (NM_017349) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Fxyd2 (NM_017349) Rat Untagged Clone
Tag: Tag Free
Symbol: Fxyd2
Synonyms: ATP1C; Atp1g1; GNAKATP
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN200369 representing NM_017349
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACAGGTGGTACTTGGGTGGCAGTGCCAAGGGGACGGAGAATCCCTTCGAGTATGACTATGAAACCG
TCCGCAAAGGAGGCTGATCTTCGCGGGCCTTGCTTCGTCGTCGGGACTCCTCATTCTCCTCAGCAAAG
ATTCCGCTGTGGGGCAGTAAGAAGCATAGGCAGGTCAATGAAGATGAGCTGTGA****

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_017349
Insert Size: 195 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).



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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: [NM_017349.2](#), [NP_059045.2](#)

RefSeq Size: 195 bp

RefSeq ORF: 195 bp

Locus ID: 29639

UniProt ID: [Q04679](#)

Cytogenetics: 8q22

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. This gene, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. Related gene family members have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members, 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. Two transcript variants have been described for this gene that encode distinct isoforms. [provided by RefSeq, Jan 2010]

Transcript Variant: This variant (b) contains an alternate exon in the 5' coding region and 5' UTR, compared to variant a. This results in a shorter protein (isoform b) that has a distinct N-terminus, compared to isoform a.