

Product datasheet for RC205076

FXYD2 (NM_001680) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK Symbol: FXYD2

Synonyms: ATP1G1; HOMG2

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC205076 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACTGGGTTGTCGATGGACGGTGGCGGCAGCCCCAAGGGGGACGTGGACCCGTTCTACTATGACTATGAGACCGTTCGCAATGGGGGCCTGATCTTCGCTGGACTGGCCTTCATCGTGGGGCTCCTCATCCTCCAG

CAGAAGATTCCGCTGTGGGGGCAATAAGAAGCGCAGGCAAATCAATGAAGATGAGCCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205076 protein sequence

Red=Cloning site Green=Tags(s)

 $\verb|MTGLSMDGGGSPKGDVDPFYYDYETVRNGGLIFAGLAFIVGLLILLSRRFRCGGNKKRRQINEDEP|$

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6266 e05.zip

Restriction Sites: Sgfl-Mlul



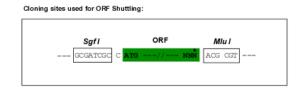
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

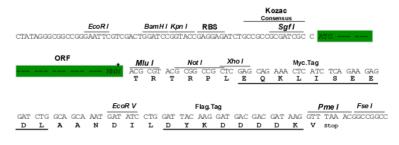
CN: techsupport@origene.cn

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_001680

ORF Size: 198 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.



RefSeq: <u>NM 001680.5</u>

RefSeq Size: 584 bp
RefSeq ORF: 201 bp
Locus ID: 486
UniProt ID: P54710
Cytogenetics: 11q23.3

Domains: ATP1G1_PLM_MAT8

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

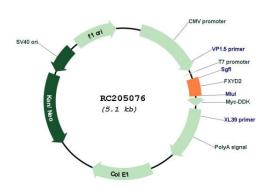
MW: 7.3 kDa

Gene Summary: This gene encodes a member of the FXYD family of transmembrane proteins. This particular

protein encodes the sodium/potassium-transporting ATPase subunit gamma. Mutations in this gene have been associated with Renal Hypomagnesemia-2. Alternatively spliced transcript variants have been described. Read-through transcripts have been observed between this locus and the upstream FXYD domain-containing ion transport regulator 6

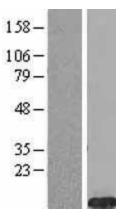
(FXYD6, GeneID 53826) locus.[provided by RefSeq, Feb 2011]

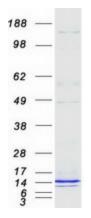
Product images:



Circular map for RC205076







Western blot validation of overexpression lysate (Cat# [LY419804]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205076 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified FXYD2 protein (Cat# [TP305076]). The protein was produced from HEK293T cells transfected with FXYD2 cDNA clone (Cat# RC205076) using MegaTran 2.0 (Cat# [TT210002]).