

# Product datasheet for RC205076

### FXYD2 (NM\_001680) Human Tagged ORF Clone

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	FXYD2 (NM_001680) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FXYD2
Synonyms:	ATP1G1; HOMG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>&gt;RC205076 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGACTGGGTTGTCGATGGACGGTGGCGGCAGCCCCAAGGGGGACGTGGACCCGTTCTACTATGACTATG AGACCGTTCGCAATGGGGGGCCTGATCTTCGCTGGACTGGCCTTCATCGTGGGGCTCCTCATCCTCCTCAG CAGAAGATTCCGCTGTGGGGGCAATAAGAAGCGCAGGCAAATCAATGAAGATGAGCCG
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG <b>GTTTAA</b>
Protein Sequence:	>RC205076 protein sequence Red=Cloning site Green=Tags(s)
	MTGLSMDGGGSPKGDVDPFYYDYETVRNGGLIFAGLAFIVGLLILLSRRFRCGGNKKRRQINEDEP
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6266_e05.zip
Restriction Sites:	Sgfl-Mlul



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#### **Cloning Scheme:**



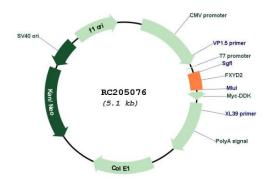
\* The last codon before the Stop codon of the ORF

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. <u>More info</u>
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	<u>NM 001680.5</u>
RefSeq Size:	584 bp
RefSeq ORF:	201 bp

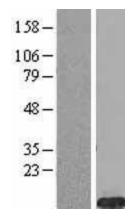
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	FXYD2 (NM_001680) Human Tagged ORF Clone – RC205076
Locus ID:	486
UniProt ID:	<u>P54710</u>
Cytogenetics:	11q23.3
Domains:	ATP1G1_PLM_MAT8
Protein Families	Druggable Genome, Ion Channels: Other, Transmembrane
MW:	7.3 kDa
Gene Summary:	This gene encodes 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:**

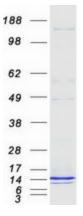


Circular map for RC205076



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]).

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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]).

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