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Product datasheet for RC225122

FXYD2 (NM_001127489) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FXYD2 (NM_001127489) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FXYD2
Synonyms:	ATP1G1; HOMG2; MGC12372
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC225122 representing NM_001127489
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTGGGTTGTCGATGGACGGTGGCGGCAGCCCCAAGGGGGACGTGGACCCGTTCTACTATGGTAAGC
CTGGGCCCCTGCGCACCCTTCCTGAGCCCTCAGGACCCCTTCCACCAAGCAGCGGCCTCTCCCAGCCCCA
GGTCCATGCTCTGTGCCCCTTATCTCCCCTGGTTACCACGGGCTGCTGCGGGCAGGCTGCGGAGAGAGAC
AGCTGCTGGGAGAGACCACCCATCCCGCTCCTCTTGCCCTCTCTTTCCGGAGACTATGAGACCGTTCGCA
ATGGGGGCCTGATCTTCGCTGGACTGGCCTTCATCGTGGGGCTCCTCATCCTCCTCAGTAAGTGGGGTGG
CCTCCAGGGAAGGGGTGCTGACCAGGGCACCTCTCTTCTCAAGGCCGCTGAGCAGGCTGGCTTTCGGGAG
TTGCCAAGGGAGGGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225122 representing NM_001127489
Red=Cloning site Green=Tags(s)

MTGLSMDGGGSPKGDVDPFYYGKPGPLRTLPEPSGPLPPSSGLSQPQVHALCPLSPLVTTGCCGQAAERD
SCWERPPIPLLLPSLSGDYETVRNGGLIFAGLAFIVGLLILLSKWGGLQGRGADQGTSLLKAAEQAGFRE
LPREG

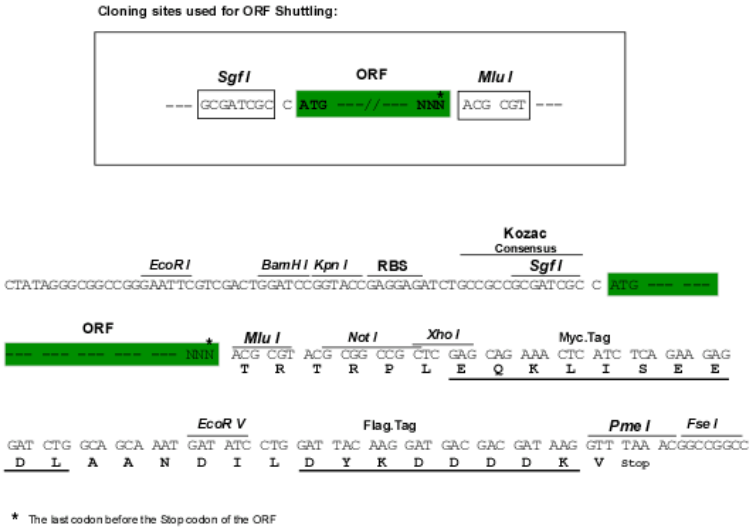
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3959_a01.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001127489

ORF Size: 435 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: NM_001127489.1, NP_001120961.1

RefSeq ORF: 437 bp

Locus ID: 486

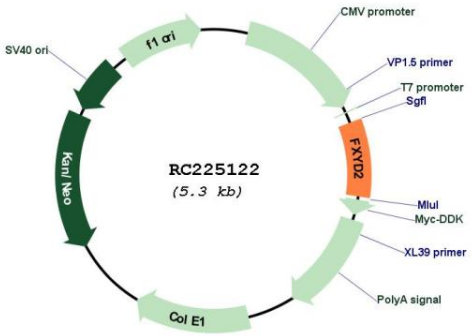
Cytogenetics: 11q23.3

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

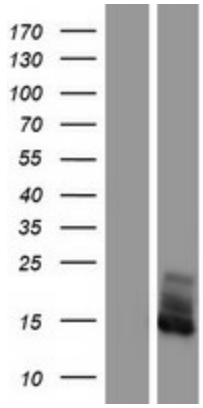
MW: 14.9 kDa

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]

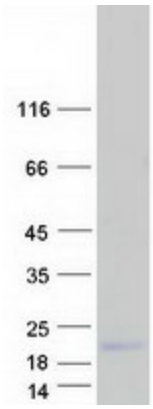
Product images:



Circular map for RC225122



Western blot validation of overexpression lysate (Cat# [LY426799]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225122 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FXYD2 protein (Cat# [TP325122]). The protein was produced from HEK293T cells transfected with FXYD2 cDNA clone (Cat# RC225122) using MegaTran 2.0 (Cat# [TT210002]).