

Product datasheet for **RR215965**

Fxyd5 (NM_001270688) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Fxyd5 (NM_001270688) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Fxyd5
Synonyms: RIC
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR215965 representing NM_001270688
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCACCGCCAGTCAGCTGTGTCTCCTCACCATTGTCGCCCTGATTCTGCCTAGTGAAGGCCAGACAC
CAGAAAAACCCAGATCCAGTTTTACAGCGCACCAGAGTTCTGTGACTACTCATGTCCAGTTCAGATCA
AACCGCCAGGAGTCCAGACCCTCCTCCATCTGGACCAGTGAAGCTGGCGAAGCCACAGGAAGCCAG
ACAGCAGCCAAAACCAAGACCCAGCAACTGACCGAAATGGCCACTGCGAATCCAGTGACAGATCCAGGGC
CACTTACAAGCAGCGAGAAAGGTACCCCGCACTCTCCAGGATCAAATCTCCAGCCACCCAAAGTTA
CATGCCTCCATCCTACATTGAGAATCCACTGGATCCCAATGAGAACAGCCCTTCTACTACGACAATACC
ACCCTCCGAAACGGGGGCTGCTGGTGGCGGCAGTGTCTTACTGGAATTATCATCTCACTAGTG
GGAAGTGTAGACAGTTCTCTCAGTTATGCCTGAATCGCCACAGG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR215965 representing NM_001270688
Red=Cloning site Green=Tags(s)

MSPPSQLCLLTIVALILPSEQTPEKPRSSFTAHQSSVTHVPVPDQTPSPGVQTPPIWTSEAGEATGSQ
TAAKTKTQQLTEMATANPVTDPGLTSSSEKGPALSRKSPSPKGYMPPSYIENPLDPNENSPFYDNT
TLRKRGLLVAAVLFITGIIILTSKCRQFSQLCLNRHR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

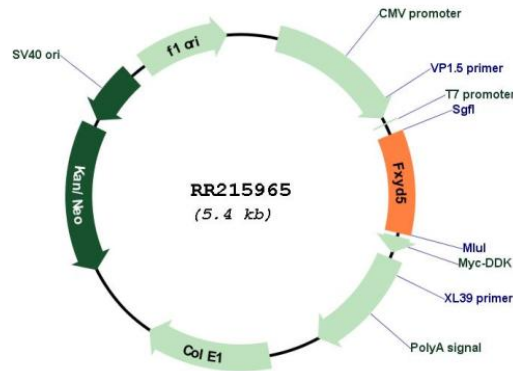


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001270688

ORF Size: 534 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:	<ol style="list-style-type: none">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:	<u>NM_001270688.1</u> , <u>NP_001257617.1</u>
RefSeq Size:	826 bp
RefSeq ORF:	537 bp
Locus ID:	60338
UniProt ID:	<u>P59647</u>
Cytogenetics:	1q21
MW:	19.1 kDa
Gene Summary:	<p>This reference sequence was derived from multiple replicate ESTs and validated by similar mouse cDNA sequence and human genomic sequence. 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. Three transcript variants encoding the same protein have been found for this gene. [RefSeq curation by Kathleen J. Sweadner, Ph.D., sweadner@helix.mgh.harvard.edu., Dec 2000]</p>