

## Product datasheet for **RC213945**

### **FXYD3 (NM\_005971) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** FXYD3 (NM\_005971) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** FXYD3  
**Synonyms:** MAT8; PLML  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC213945 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

**ATGCAGAAGGTGACCCTGGGCTGCTTGTGTTCTGGCAGGCTTTCCTGTCCTGGACGCCAATGACCTAG**  
**AAGATAAAAACAGTCCTTTCTACTATGACTGGCACAGCCTCCAGGTTGGCGGGCTCATCTGCGCTGGGGT**  
**TCTGTGCGCCATGGGCATCATCATCGTCATGAGTGCAAATGCAAATGCAAGTTTGGCCAGAAGTCCGGT**  
**CACCATCCAGGGGAGACTCCACCTCTCATACCCAGGCTCAGCCCAAAGC**

**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT**  
**ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:** >RC213945 protein sequence  
**Red=Cloning site Green=Tags(s)**  
MQKVTLGLLVFLAGFPVLDANDLEDKNSPFYYDWHSLQVGLICAGVLCAMGIIIVMSAKCKCKFGQKSG  
HHPGETPPLITPGSAQS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6454\\_h10.zip](https://cdn.origene.com/chromatograms/mk6454_h10.zip)

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_005971

**ORF Size:** 261 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\\_005971.4](#)

**RefSeq Size:** 1382 bp

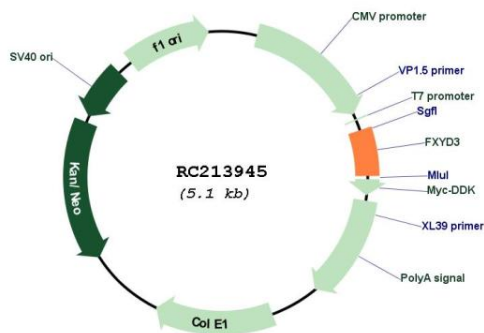
**RefSeq ORF:** 264 bp

**Locus ID:** 5349

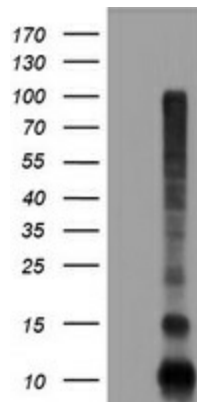
**UniProt ID:** [Q14802](#)  
**Cytogenetics:** 19q13.12  
**Domains:** ATP1G1\_PLM\_MAT8  
**Protein Families:** Ion Channels: Other, Transmembrane  
**MW:** 9.3 kDa

**Gene Summary:** This gene belongs to a small family of FXYD-domain containing regulators of Na<sup>+</sup>/K<sup>+</sup> ATPases which 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 encodes a cell membrane protein that may regulate the function of ion-pumps and ion-channels. This gene may also play a role in tumor progression. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Oct 2008]

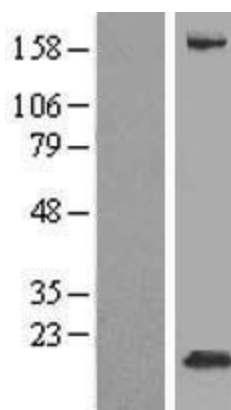
### Product images:



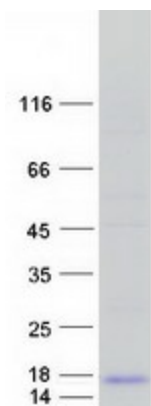
Circular map for RC213945



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FXYD3 (Cat# RC213945, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FXYD3 (Cat# [TA504717]). Positive lysates [LY416954] (100ug) and [LC416954] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY427762]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227235] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FXYD3 protein (Cat# [TP313945]). The protein was produced from HEK293T cells transfected with FXYD3 cDNA clone (Cat# RC213945) using MegaTran 2.0 (Cat# [TT210002]).