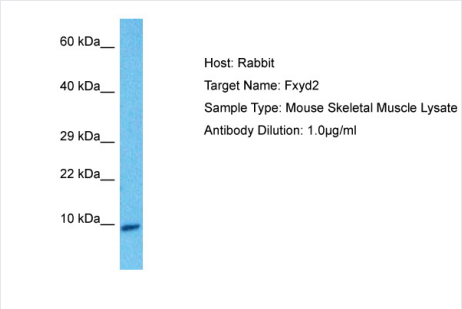
FXYD2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	FXYD2, Polyclonal Antibody
Full Product Name	FXYD2 Antibody - middle region
Product Gene Name	anti-FXYD2 antibody
Product Synonym Gene Name	Atp1g1
Immunogen Sequence	Synthetic peptide located within the following region: DYETVRKGGL IFAGLAFVVG LLIILSKRFR CGGGKKHRQV NEDEL
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Mouse
Form/Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Purity/Purification	Affinity purified
Preparation and Storage	For short term use, store at 2-8 degree C up to 1 week. For long term storage, store at -20 degree C in small aliquots to prevent freeze-thaw cycles.
Antibody/Peptide Pairs	FXYD2 peptide (MBS3248345) is used for blocking the activity of FXYD2 antibody (MBS3223739)
Molecular Weight	7 kDa
3D Structure	ModBase 3D Structure for Q04646
Immunogen	The immunogen is a synthetic peptide directed towards the middle terminal region of Mouse FXYD2
Product Categories/Family for anti-FXYD2 antibody	Polyclonal; Ion Channel; Membrane Protein
Applications Tested/Suitable for anti-FXYD2 antibody	Western Blot (WB)
Related Product Information for anti-FXYD2 antibody	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. The Type III integral membrane protein encoded by this gene is the gamma subunit of the Na,K-ATPase present on the plasma membrane. Although the Na,K-ATPase does not depend on the gamma subunit to be functional, it is thought that the gamma subunit modulates the enzyme's activity by inducing ion channel activity. Multiple transcript variants have been described for this gene that are expressed in tissue-specific and developmental stage-specific patterns and encode proteins that differ at the N-terminus.
Other Notes	Small volumes of anti-FXYD2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for FXYD2 purchase	MBS3223739 is an antibody targeting FXYD2. Also known as FXYD2 Antibody - middle region. Reactive in Mouse. Host: Rabbit.



Western Blot (WB) of anti-FXYD2 antibody
Host: RabbitTarget Name: FXYD2Sample Tissue: Mouse Skeletal Muscle lysatesAntibody Dilution: 1ug/ml

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for FXYD2. It may not necessarily be applicable to this product.

NCBI GI #	16554570
NCBI GeneID	11936
NCBI Accession #	NP_031529.2
UniProt Primary Accession #	Q04646
UniProt Related Accession #	Q04646
GenBank Nucleotide #	NM_007503.3
NCBI Official Full Name	sodium/potassium-transporting ATPase subunit gamma isoform a
NCBI Official Synonym Full Names	FXYD domain-containing ion transport regulator 2
NCBI Official Symbol	Fxyd2
NCBI Official Synonym Symbols	Atp1g1
UniProt Protein Name	Sodium/potassium-transporting ATPase subunit gamma
UniProt Synonym Protein Names	FXYD domain-containing ion transport regulator 2; Sodium pump gamma chain
Protein Family	Sodium/potassium-transporting ATPase
UniProt Gene Name	Fxyd2
UniProt Synonym Gene Names	Atp1c; Atp1g1; Na(+)/K(+) ATPase subunit gamma
UniProt Entry Name	ATNG_MOUSE
NCBI Protein Information	sodium/potassium-transporting ATPase subunit gamma
UniProt Comments for FXYD2	FXYD2: May be involved in forming the receptor site for cardiac glycoside binding or may modulate the transport function of the sodium ATPase. Defects in FXYD2 are the cause of hypomagnesemia type 2 (HOMG2); also known as dominant renal hypomagnesemia or hypomagnesemia with hypocalciuria. HOMG2 is a disorder due to primary renal wasting of magnesium. Plasma levels of other electrolytes are normal. The only abnormality found, in addition to low magnesium levels, is lowered renal excretion of calcium resulting in hypocalciuria. Belongs to the FXYD family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral Cellular Component: membrane; integral to plasma membrane; integral to membrane Molecular Function: sodium channel regulator activity; ion channel activity Biological Process: transport; sodium ion transport; ion transport; potassium ion transport

Research Articles on FXYD2	**1.** FXYD2 activity may be a fundamental mechanism underlying the persistent hypersensitivity to pain induced by inflammation.
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