

FXYD2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant FXYD2.

Catalog # AT2128a

Product Information

Application	WB, IHC
Primary Accession	P54710
Other Accession	BC005302
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2b kappa
Clone Names	1C3-B3
Calculated MW	7283

Additional Information

Gene ID	486
Other Names	Sodium/potassium-transporting ATPase subunit gamma, Na(+)/K(+) ATPase subunit gamma, FXYD domain-containing ion transport regulator 2, Sodium pump gamma chain, FXYD2, ATP1C, ATP1G1
Target/Specificity	FXYD2 (AAH05302.1, 1 a.a. ~ 64 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	FXYD2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

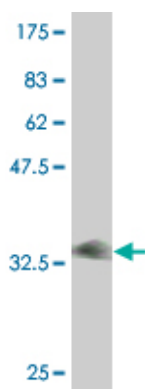
This gene encodes a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXYD and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYD-domain containing ion transport 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. Mutations in this gene have been associated with renal hypomagnesaemia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

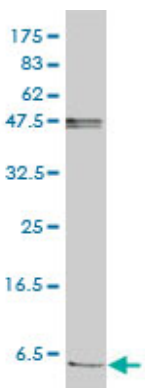
References

1.A genomic-based approach identifies FXYD domain containing ion transport regulator 2 (FXYD2)gammaa as a pancreatic beta cell-specific biomarker.Flamez D, Roland I, Berton A, Kutlu B, Dufrane D, Beckers MC, De Waele E, Rooman I, Bouwens L, Clark A, Lonneux M, Jamar JF, Goldman S, Marechal D, Goodman N, Gianello P, Van Huffel C, Salmon I, Eizirik DL.Diabetologia. 2010 Apr 9. [Epub ahead of print]

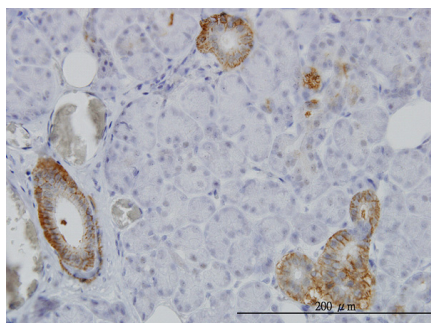
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (32.78 KDa) .



FXYD2 monoclonal antibody (M01), clone 1C3-B3 Western Blot analysis of FXYD2 expression in Jurkat ((Cat # AT2128a)



Immunoperoxidase of monoclonal antibody to FXYD2 on formalin-fixed paraffin-embedded human salivary gland. [antibody concentration 3 ug/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.