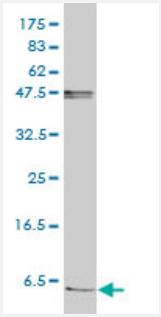
FXYD2 monoclonal antibody (M01), clone 1C3-B3

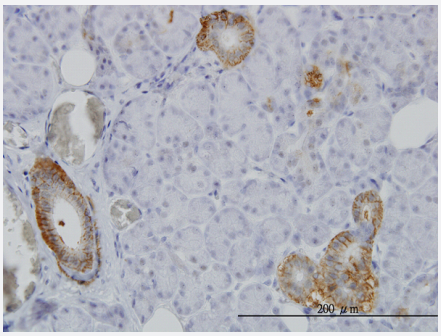
Catalog # H00000486-M01 Size 100 ug

Applications



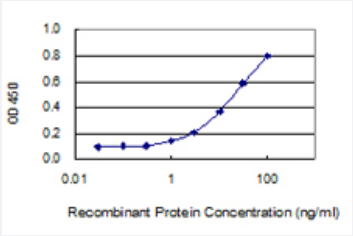
Western Blot (Cell lysate)

FXYD2 monoclonal antibody (M01), clone 1C3-B3 Western Blot analysis of FXYD2 expression in Jurkat (Cat # L017V1).



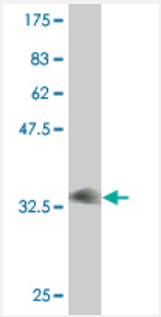
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged FXYD2 is 0.3 ng/ml as a capture antibody.



Western Blot detection against Immunogen (32.78 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant FXYD2.
Immunogen	FXYD2 (AAH05302.1, 1 a.a. ~ 64 a.a) full-length recombinant protein with GST tag. MW of the GST t ag alone is 26 KDa.
Sequence	MDRWYLGGSPKGDVDPFYYDYETVRNGGLIFAGLAFIVGLLILLSRRFRCGGNKKRRQINEDEP
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Rat (83)
Isotype	IgG2b kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (32.78 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

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  Protocol Download

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- ELISA

Gene Info — FXYD2

Entrez GeneID	486
GeneBank Accession#	BC005302
Protein Accession#	AAH05302.1
Gene Name	FXYD2
Gene Alias	ATP1G1, HOMG2, MGC12372
Gene Description	FXYD domain containing ion transport regulator 2
Omim ID	154020 601814
Gene Ontology	Hyperlink
Gene Summary	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 C hannel). 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), an d FXYD5 (RIC) have been shown to induce channel activity in experimental expression systems. T ransmembrane 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 Ty pe 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 su bunit to be functional, it is thought that the gamma subunit modulates the enzyme's activity by indu cing ion channel activity. Mutations in this gene have been associated with renal hypomagnesaem ia. Alternatively spliced transcript variants encoding different isoforms have been found for this ge ne. [provided by RefSeq

Other Designations	ATPase, Na+/K+ transporting, gamma 1 polypeptide|FXYD domain-containing ion transport regulator 2|Sodium-potassium-ATPase, gamma polypeptide|hypomagnesemia 2, renal

Publication Reference

- 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 Jul; 53(7):1372.

  Application: IHC-P, WB-Re, Human, Human pancreatic islets, Recombinant protein