

Anti-FXYD1 Picoband Antibody

Catalog # ABO12390

Product Information

Application	WB, IHC-P
Primary Accession	O00168
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Phospholemman(FXYD1) detection. Tested with WB, IHC-P in Human;Rat;Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5348
Other Names	Phospholemman, FXYD domain-containing ion transport regulator 1, FXYD1, PLM
Calculated MW	10441
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Tissue Specificity	Highest expression in skeletal muscle and heart. Moderate levels in brain, placenta, lung, liver, pancreas, uterus, bladder, prostate, small intestine and colon with mucosal lining. Very low levels in kidney, colon and small intestine without mucosa, prostate without endothelial lining, spleen, and testis.
Source	Eukaryota
Protein Name	Phospholemman
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E.coli-derived human FXYD1 recombinant protein (Position: E21-R92). Human FXYD1 shares 86.1% and 87.5% amino acid (aa) sequence identity with mouse and rat FXYD1, respectively.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.

Protein Information

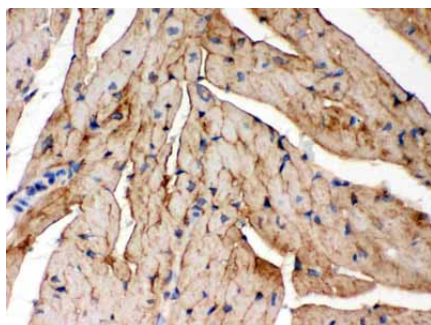
Name	FXYP1 (HGNC:4025)
Function	Associates with and regulates the activity of the sodium/potassium-transporting ATPase (NKA) which transports Na(+) out of the cell and K(+) into the cell. Inhibits NKA activity in its unphosphorylated state and stimulates activity when phosphorylated. Reduces glutathionylation of the NKA beta-1 subunit ATP1B1, thus reversing glutathionylation-mediated inhibition of ATP1B1. Contributes to female sexual development by maintaining the excitability of neurons which secrete gonadotropin-releasing hormone.
Cellular Location	Cell membrane, sarcolemma {ECO:0000250 UniProtKB:P56513}; Single-pass type I membrane protein. Apical cell membrane {ECO:0000250 UniProtKB:O08589}; Single-pass type I membrane protein. Membrane, caveola {ECO:0000250 UniProtKB:O08589}. Cell membrane, sarcolemma, T-tubule {ECO:0000250 UniProtKB:O08589}. Note=Detected in the apical cell membrane in brain. In myocytes, localizes to sarcolemma, t-tubules and intercalated disks. {ECO:0000250 UniProtKB:O08589}
Tissue Location	Highest expression in skeletal muscle and heart. Moderate levels in brain, placenta, lung, liver, pancreas, uterus, bladder, prostate, small intestine and colon with mucosal lining. Very low levels in kidney, colon and small intestine without mucosa, prostate without endothelial lining, spleen, and testis

Background

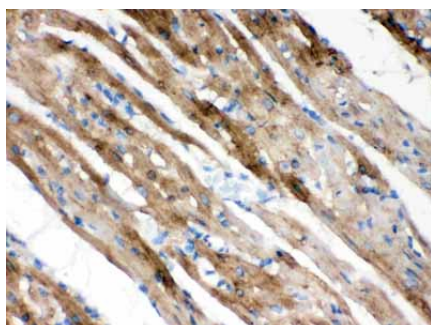
Phospholemman is a protein that in humans is encoded by the FXYP1 gene. This gene encodes a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXYP and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYP-domain containing ion transport regulator. FXYP1 (phospholemman), FXYP2 (gamma), FXYP3 (MAT-8), FXYP4 (CHIF), and FXYP5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXYP1 and FXYP2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. The protein encoded by this gene is a plasma membrane substrate for several kinases, including protein kinase A, protein kinase C, NIMA kinase, and myotonic dystrophy kinase. Transcript variants with different 5' UTR sequences have been described in the literature.

Images

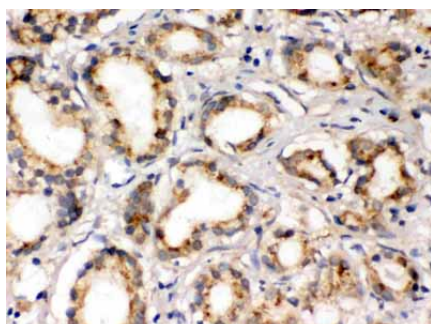
Anti- FXYZ1 Picoband antibody, ABO12390, Western blottingAll lanes: Anti FXYZ1 (ABO12390) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Cardiac Muscle Tissue Lysate at 50ugLane 3: Mouse Cardiac Muscle Tissue Lysate at 50ugLane 4: HEPG2 Whole Cell Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugPredicted bind size: 10KDObserved bind size: 10KD



Anti- FXYZ1 Picoband antibody, ABO12390, IHC(P)IHC(P):
Mouse Cardiac Muscle Tissue



Anti- FXYZ1 Picoband antibody, ABO12390, IHC(P)IHC(P):
Rat Cardiac Muscle Tissue



Anti- FXYZ1 Picoband antibody, ABO12390, IHC(P)IHC(P):
Human Prostatic Cancer Tissue

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