

Mouse PLM Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1126a

Product Information

Application	WB, E
Primary Accession	Q9Z239
Other Accession	O08589
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	10323
Antigen Region	21-57

Additional Information

Gene ID	56188
Other Names	Phospholemman, FXYP domain-containing ion transport regulator 1, Fxyd1, Plm
Target/Specificity	This Mouse PLM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of mouse PLM.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse PLM Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Fxyd1 {ECO:0000312 MGI:MGI:1889273}
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 (PubMed: 15563542 , PubMed: 18065526). Inhibits NKA activity in its unphosphorylated state and stimulates activity when

phosphorylated (By similarity). Reduces glutathionylation of the NKA beta-1 subunit ATP1B1, thus reversing glutathionylation- mediated inhibition of ATP1B1 (PubMed:[21454534](#)). Contributes to female sexual development by maintaining the excitability of neurons which secrete gonadotropin-releasing hormone (PubMed:[19187398](#)).

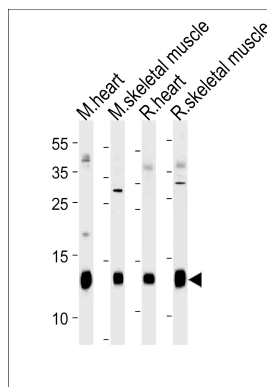
Cellular Location

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}

Background

This gene encodes a member of the FXYD family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXVD and containing 7 invariant and 6 highly conserved amino acids. 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. It is thought to form an ion channel or regulate ion channel activity and act as an accessory protein of Na,K-ATPase. Alternative splicing of this gene results in multiple transcript variants which encode the same protein.

Images



Mouse PLM Antibody (E1) (Cat. #AP1126a) western blot analysis in mouse heart,skeletal muscle and rat heart,skeletal muscle tissue lysates (35ug/lane).This demonstrates the PLM antibody detected the PLM protein (arrow).

Citations

- [Left ventricular function of isoproterenol-induced hypertrophied rat hearts perfused with blood: mechanical work and energetics.](#)

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