

# M PLM Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5084

#### **Product Information**

ApplicationWBPrimary AccessionQ9Z239Other AccessionQ08589

**Reactivity** Mouse, Rat, Human

Predicted Human, Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 10323
Isotype Rabbit IgG
Antigen Source MOUSE

### **Additional Information**

**Gene ID** 56188

Other Names Phospholemman [Precursor]; FXYD domain-containing ion transport regulator

1; Fxyd1; Plm;

**Dilution** WB~~1:1000

**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.

**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** M 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).

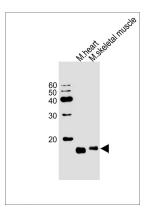
#### **Cellular Location**

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 PFXYD 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**



Western blot analysis of lysates from mouse heart, mouse skeletal muscle cell line (from left to right), using PLM Antibody (E1)(Cat. #AW5084). AW5084 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

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