

# Rabbit Anti-FXYD1 antibody

SL4104R

Product Name:	FXYD1
Chinese Name:	磷酸神经膜抗体 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
Alias:	FXYD domain containing ion transport regulator 1; Phospholemman; PLM; fxyd1; PLM_HUMAN; FXYD domain-containing ion transport regulator 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	8.4kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FXYD1:21- 75/92 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	PLM (FXYD1) is 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. 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. PLM may be phosphorylated by 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.

## **Function:**

May have a functional role in muscle contraction. Induces a hyperpolarization-activated chloride current when exogenously expressed.

# **Subcellular Location:**

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.

## **Post-translational modifications:**

Major plasma membrane substrate for cAMP-dependent protein kinase (PK-A) and protein kinase C (PK-C) in several different tissues. Phosphorylated in response to insulin and adrenergic stimulation. May be phosphorylated by DMPK (By similarity). Palmitoylation increases half-life and stability, it is enhanced upon phosphorylation at Ser-88 by PKA.

Similarity: Belongs to the FXYD family.

SWISS: 000168

Gene ID: 5348

Database links:

Entrez Gene: 476487Dog

Entrez Gene: 5348Human

Entrez Gene: 56188 Mouse

Entrez Gene: 58971Rat

<u>Omim: 602359</u>Human

SwissProt: P56513Dog

SwissProt: 000168Human
SwissProt: Q9Z239Mouse
SwissProt: 008589Rat
Unigene: 442498Human
Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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