

Mouse anti-Mouse Phospho-PLM (S68) Monoclonal Antibody | anti-Fxyd1 antibody

Phospho-PLM (S68) Antibody

CATALOG # AAA283536	HOST Mouse	REACTIVITY Mouse	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

Phospho-PLM (S68); Monoclonal Antibody; Phospho-PLM (S68) Antibody; Phospholemman; FXYP domain-containing ion transport regulator 1; Fxyd1; Plm; anti-Fxyd1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	41AT858.235
Specificity	This PLM Antibody is generated from mice immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S68 of human PLM.
Purity/Purification	Purified Mouse Monoclonal Antibody (Mab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Sequence Length	95
Applicable Applications for anti-Fxyd1 antibody	ELISA, WB (Western Blot)
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: , PubMed:). 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:). Contributes to female sexual development by maintaining the excitability of neurons which secrete gonadotropin-releasing hormone (PubMed:).
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}
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
Western blot analysis of anti-PLM Mab (AAA283536) in 293 cells transfected with a plasmid encoding PLM.

ADDITIONAL INFORMATION

Related Product Information for anti-Fxyd1 antibody	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. Alternatively spliced transcript variants have been described.
Product Categories/Family for anti-Fxyd1 antibody	Cardiovascular; Signal Transduction; Phospho Antibodies
References	Phospholemman and beta-adrenergic stimulation in the heart. Wang J, et al. Am J Physiol Heart Circ Physiol, 2010 Mar. PMID 20008271. Extracellular potassium dependence of the Na+-K+-ATPase in cardiac myocytes: isoform specificity and effect of phospholemman. Han F, et al. Am J Physiol Cell Physiol, 2009 Sep. PMID 19570895. FXYD1, a modulator of Na,K-ATPase activity, facilitates female sexual development by maintaining gonadotrophin-releasing hormone neuronal excitability. Garcia-Rudaz C, et al. J Neuroendocrinol, 2009 Feb. PMID 19187398. Cell volume control in phospholemman (PLM) knockout mice: do cardiac myocytes demonstrate a regulatory volume decrease and is this influenced by deletion of PLM? Bell JR, et al. Exp Physiol, 2009 Mar. PMID 19074587. Regulation of cardiac myocyte contractility by phospholemman: Na+/Ca2+ exchange versus Na+ -K+ -ATPase. Song J, et al. Am J Physiol Heart Circ Physiol, 2008 Oct. PMID 18708446.

NCBI AND UNIPROT INFORMATION

NCBI GI #	259490450
NCBI GeneID	56188
NCBI Accession #	NP_062376.2; NP_443717.1; NP_443718.1; NP_919302.1
NCBI GenBank Nucleotide #	NM_019503.4
UniProt Accession #	Q9Z239
NCBI Official Full Name	phospholemman isoform a
NCBI Official Synonym Full Names	FXYD domain-containing ion transport regulator 1
NCBI Official Symbol	Fxyd1
NCBI Official Synonym Symbols	Plm; Pml; 0610012C17Rik; 1110006M24Rik
NCBI Protein Information	phospholemman
UniProt Protein Name	Phospholemman
UniProt Gene Name	Fxyd1
UniProt Synonym Gene Names	Plm
UniProt Entry Name	PLM_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

