

PMCA1 Rabbit mAb

Catalog # AP75929

Product Information

Application	WB, IHC-P
Primary Accession	P20020
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	134685

Additional Information

Gene ID	490
Other Names	ATP2B1
Dilution	WB~~1/500-1/1000 IHC-P~~N/A
Format	Liquid

Protein Information

Name	ATP2B1 (HGNC:814)
Function	<p>Catalyzes the hydrolysis of ATP coupled with the transport of calcium from the cytoplasm to the extracellular space thereby maintaining intracellular calcium homeostasis (PubMed:35358416). Plays a role in blood pressure regulation through regulation of intracellular calcium concentration and nitric oxide production leading to regulation of vascular smooth muscle cells vasoconstriction. Positively regulates bone mineralization through absorption of calcium from the intestine. Plays dual roles in osteoclast differentiation and survival by regulating RANKL-induced calcium oscillations in preosteoclasts and mediating calcium extrusion in mature osteoclasts (By similarity). Regulates insulin sensitivity through calcium/calmodulin signaling pathway by regulating AKT1 activation and NOS3 activation in endothelial cells (PubMed:29104511). May play a role in synaptic transmission by modulating calcium and proton dynamics at the synaptic vesicles.</p>
Cellular Location	<p>Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250 UniProtKB:G5E829}. Synapse {ECO:0000250 UniProtKB:G5E829}. Presynaptic cell membrane {ECO:0000250 UniProtKB:G5E829}; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250 UniProtKB:G5E829}; Multi-pass membrane protein. Note=Colocalizes with SV2A in photoreceptor synaptic terminals. Colocalizes with NPTN to the immunological synapse. Colocalizes with EPB41 to the</p>

basolateral membrane in enterocyte. Preferentially sorted to recycling synaptic vesicles. {ECO:0000250 | UniProtKB:G5E829}

Tissue Location

Isoform B: Ubiquitously expressed. Isoform C: Found in brain cortex, skeletal muscle and heart muscle. Isoform D: Has only been found in fetal skeletal muscle. Isoform K: Found in small intestine and liver. Abundantly expressed in the endometrial epithelial cells and glandular epithelial cells in early-proliferative phase and early-secretory phases (PubMed:21400627)

Images



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