10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PMCA4 Rabbit pAb

Catalog # AP96867

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P23634
Other Accession	P23634
Predicted	Rat, Human, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	137920
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PMCA4
Epitope Specificity	901-1000/1241
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SIMILARITY	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIB subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Plasma membrane-type Ca2+-ATPases (PMCAs) mediate the export of bivalent calcium ions from eukaryotic cells. As members of the P class of ion-motive ATPases, PMCAs are a functionally diverse group of proteins that are derived from alternatively spliced transcripts originating from four distinct genes, PMCA1, 2, 3, and 4. The expression of different PMCA isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, and with respect to the physiological needs of specific cell and tissue types. Spatial and temporal rates of resting intracellular Ca2+ concentrations and Ca2+ signaling in eukaryotic cells are dependent on the array of PMCA isoforms that are expressed in concert with the rate of Ca2+ export. PMCA3 expression is confined to brain and skeletal muscle. The PMCA4 gene is located on human chromosome 1q25 and is ubiquitously expressed.

Additional Information

Gene ID	493
Other Names	PMCA4; ATP2B2; MXRA1; PMCA4b; PMCA4x; AT2B4_HUMAN; ATP2B4; Matrix-remodeling-associated protein 1; Plasma membrane calcium ATPase isoform 4; Plasma membrane calcium pump isoform 4; 7.2.2.10; Q32ME1_MOUSE; AT2B4_RAT; ATPase plasma membrane Ca2+ transporting 4; matrix-remodelling associated 1; ATPase, Ca++ transporting, plasma membrane 4; plasma membrane calcium-transporting ATPase 4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	ATP2B4 (HGNC:817)
Synonyms	ATP2B2, MXRA1
Function	Calcium/calmodulin-regulated and magnesium-dependent enzyme that catalyzes the hydrolysis of ATP coupled with the transport of calcium out of the cell (PubMed:8530416). By regulating sperm cell calcium homeostasis, may play a role in sperm motility (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, cilium, flagellum membrane {ECO:0000250|UniProtKB:Q6Q477}; Multi-pass membrane protein
Tissue Location	Isoform XB is the most abundant isoform and is expressed ubiquitously. Isoforms containing segment Z have only been detected in heart, while isoforms containing segment a have been found in heart, stomach and brain cortex.

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