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PMCA2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58452

Specification

PMCA2 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, E**
Primary Accession	Q01814
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**136876**

PMCA2 Polyclonal Antibody - Additional Information

Gene ID 491

Other Names
Plasma membrane calcium-transporting ATPase 2, PMCA2, 7.2.2.10, Plasma membrane calcium ATPase isoform 2, Plasma membrane calcium pump isoform 2, ATP2B2, PMCA2

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

PMCA2 Polyclonal Antibody - Protein Information

Name ATP2B2 {ECO:0000303|PubMed:15829536, ECO:0000312|HGNC:HGNC:815}

Function
ATP-driven Ca(2+) ion pump involved in the maintenance of basal intracellular Ca(2+) levels in specialized cells of cerebellar circuit and vestibular and cochlear systems (PubMed:15829536, PubMed:17234811). Uses ATP as an energy source to transport cytosolic Ca(2+) ions across the plasma membrane to the extracellular compartment (PubMed:15829536, PubMed:17234811). Has fast activation and Ca(2+) clearance rate suited to control fast neuronal Ca(2+) dynamics. At parallel fiber to Purkinje neuron synapse, mediates presynaptic Ca(2+) efflux in response to climbing fiber-induced Ca(2+) rise. Provides for fast return of Ca(2+)

concentrations back to their resting levels, ultimately contributing to long-term depression induction and motor learning (By similarity). Plays an essential role in hearing and balance (PubMed:15829536, PubMed:17234811). In cochlear hair cells, shuttles Ca(2+) ions from stereocilia to the endolymph and dissipates Ca(2+) transients generated by the opening of the mechanoelectrical transduction channels. Regulates Ca(2+) levels in the vestibular system, where it contributes to the formation of otoconia (PubMed:15829536, PubMed:17234811). In non-excitable cells, regulates Ca(2+) signaling through spatial control of Ca(2+) ions extrusion and dissipation of Ca(2+) transients generated by store-operated channels (PubMed:25690014). In lactating mammary gland, allows for the high content of Ca(2+) ions in the milk (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein. Synapse {ECO:0000250|UniProtKB:Q9R0K7} [Isoform WB]: Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein [Isoform ZA]: Basolateral cell membrane; Multi-pass membrane protein

Tissue Location
Mainly expressed in brain cortex. Found in low levels in skeletal muscle, heart muscle, stomach, liver, kidney and lung. Isoforms containing segment B are found in brain cortex and at low levels in other tissues. Isoforms containing segments X and W are found at low levels in all tissues. Isoforms containing segment A and segment Z are found at low levels in skeletal muscle and heart muscle

PMCA2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PMCA2 Polyclonal Antibody - Images

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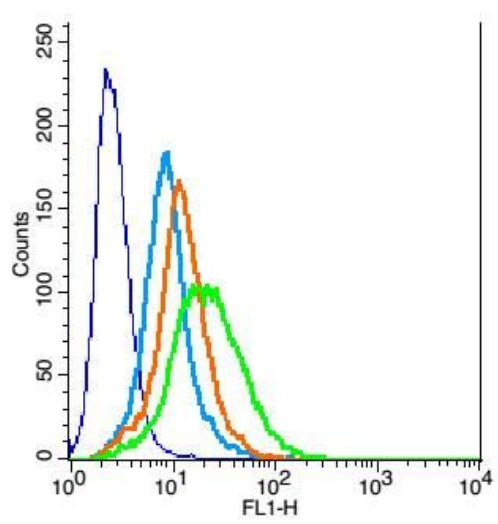

Blank control: H9C2 (blue)

Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 3 µl in 100 µL1X PBS containing 0.5% BSA(green).