

Rabbit Anti-PMCA2 antibody

SL6499R

PMCA2
The cell membrane钙转运ATP酶抗体
ATP2B1; ATP2B2; ATP2B3; ATP2B4; ATPase Ca++ transporting plasma membrane 1; ATPase Ca++ transporting plasma membrane 2; ATPase Ca++ transporting plasma membrane 3; ATPase Ca++ transporting plasma membrane 4; Plasma membrane calcium transporting ATPase 1; Plasma membrane calcium transporting ATPase 2; Plasma membrane calcium transporting ATPase 3; Plasma membrane calcium transporting ATPase 4; PMCA1; PMCA2; PMCA3; PMCA4; AT2B2_HUMAN.
Rabbit
Polyclonal
Human,Mouse,Rat,Dog,Cow,Horse,
ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
137kDa
The cell membrane
Lyophilized or Liquid
1mg/ml
KLH conjugated synthetic peptide derived from human PMCA:361- 460/1243 <extracellular></extracellular>
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
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
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 at least four distinct genes. The expression of different PMCA isoforms and splice variants is regulated in a developmental, tissueand 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.

Function:

This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of calcium out of the cell.

Subcellular Location: Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

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.

Similarity:

Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIB subfamily.

SWISS: 001814

Gene ID: 491

Database links:

Entrez Gene: 491Human

Entrez Gene: 11941Mouse

Entrez Gene: 24215Rat

Omim: 108733Human

SwissProt: Q01814Human

SwissProt: Q9R0K7Mouse

