



## Rabbit Anti-PMCA3 antibody

SL20009R

<b>Product Name:</b>	PMCA3
<b>Chinese Name:</b>	ATP酶钙离子TransporterPMCA3抗体
<b>Alias:</b>	ATP2B3; ATP2B3 protein; Calcium Pump PMCA3 ATPase; ATPase Ca <sup>++</sup> transporting plasma membrane 3; Plasma membrane calcium ATPase 3; Plasma membrane calcium ATPase isoform 3; Plasma membrane calcium pump isoform 3; Plasma membrane calcium transporting ATPase 3; PMCA 3; PMCA3; PMCA3a; AT2B3 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	134kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human PMCA3:971-1070/1220<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Plasma membrane-type Ca <sup>2+</sup> -ATPases (PMCA3s) mediate the export of bivalent calcium ions from eukaryotic cells. As members of the P class of ion-motive ATPases,

PMCA3s 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  $Ca^{2+}$  concentrations and  $Ca^{2+}$  signaling in eukaryotic cells are dependent on the array of PMCA isoforms that are expressed in concert with the rate of  $Ca^{2+}$  export. PMCA3 expression is confined to brain and skeletal muscle. The PMCA4 gene is located on human chromosome 1q25 and is ubiquitously expressed.

**Function:**

Calcium Pump PMCA3 ATPase belongs to the family of P-type primary ion transport ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against very large concentration gradients and play a critical role in intracellular calcium homeostasis. The mammalian plasma membrane calcium ATPase isoforms are encoded by at least four separate genes and the diversity of these enzymes is further increased by alternative splicing of transcripts. The expression of different isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumps are functionally adapted to the physiological needs of particular cells and tissues. Calcium Pump PMCA3 ATPase is the plasma membrane calcium ATPase isoform 3.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein.

**Tissue Specificity:**

Isoform XE and isoform XB are the most abundant isoforms and are detected at low levels in brain and fetal skeletal muscle. The other isoforms are only found at lower levels and not in fetal tissues.

**Similarity:**

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

**SWISS:**

Q16720

**Gene ID:**

490

**Database links:**

[Entrez Gene: 490](#) Human

[Entrez Gene: 491](#) Human

[Entrez Gene: 492](#) Human

[Entrez Gene: 493](#) Human

[SwissProt: P20020](#) Human

[SwissProt: P23634](#) Human

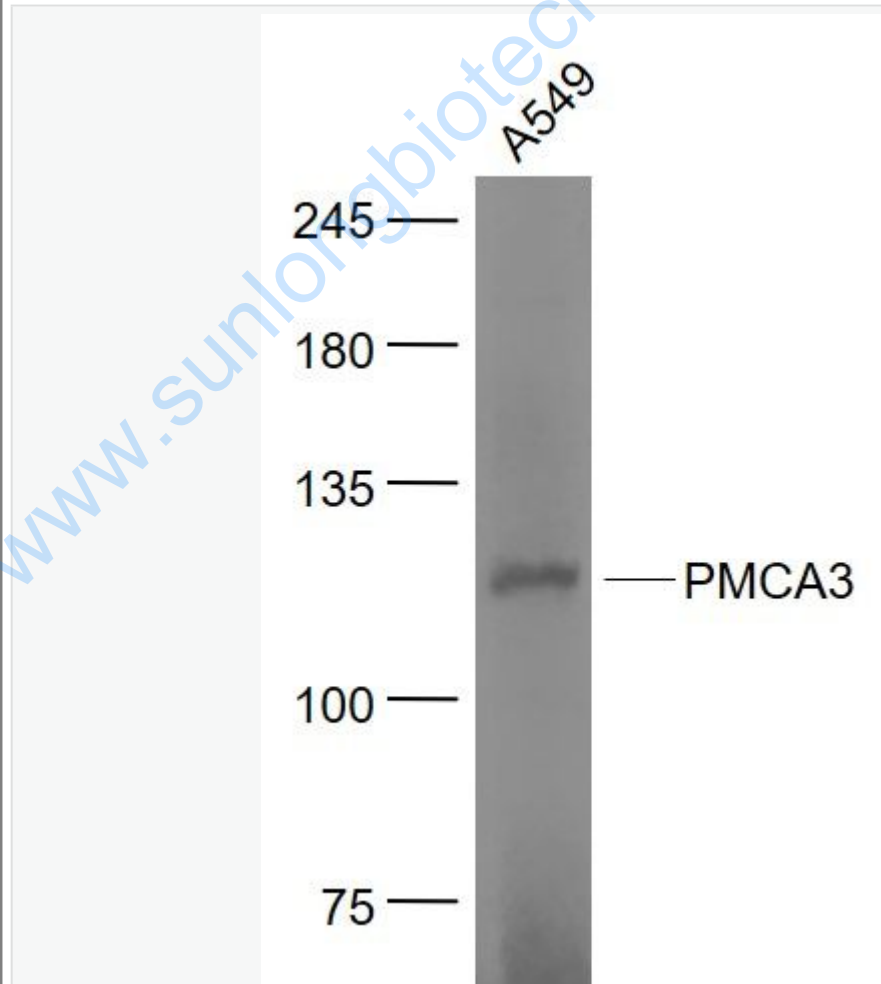
[SwissProt: Q01814](#) Human

[SwissProt: Q16720](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

A549(Human) Cell Lysate at 30 ug

Primary: Anti- PMCA3 (SL20009R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 134 kD

Observed band size: 122 kD

[www.sunlongbiotech.com](http://www.sunlongbiotech.com)