# abcam

## Product datasheet

# Anti-Calcium Pump PMCA3 ATPase antibody ab3530

**★★★★★ 3 Abreviews** 5 References 3 Images

#### Overview

Product name Anti-Calcium Pump PMCA3 ATPase antibody

**Description** Rabbit polyclonal to Calcium Pump PMCA3 ATPase

Host species Rabbit

**Specificity** Detects PMCA 3a and 3b ATPase.

Tested applications

Suitable for: IHC, IHC-P

Species reactivity

Reacts with: Human

**Immunogen** Synthetic peptide corresponding to Rat Calcium Pump PMCA3 ATPase aa 1-100.

Positive control IHC: Human skeletal muscle tissue ; Human brain tissue ; Liver tissue

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**Storage buffer** Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

1

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab3530 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC		1/20.
IHC-P	<b>★★★★☆ (1)</b>	1/20.

#### **Target**

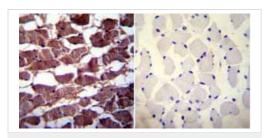
#### Relevance

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.

#### **Cellular localization**

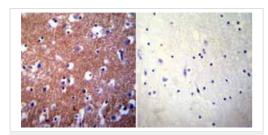
Cell membrane; Multi-pass membrane protein.

### **Images**



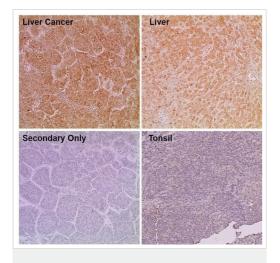
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calcium Pump PMCA3 ATPase antibody (ab3530) Immunohistochemistry was performed on normal biopsies of deparaffinized Human skeletal muscle tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes.

Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:20 with a rabbit polyclonal antibody recognizing PMCA3 ATPase ab3530 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calcium Pump PMCA3
ATPase antibody (ab3530)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human brain tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:20 with a rabbit polyclonal antibody recognizing PMCA3 ATPase ab3530 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry - Anti-Calcium Pump PMCA3
ATPase antibody (ab3530)

Immunohistochemical analysis of liver and liver cancer tissue labelling Calcium Pump PMCA3 ATPase with ab3530. No staining observed in secondary antibody only control, and human tonsil which does not express Calcium Pump PMCA3 ATPase.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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