

**SERCA2 Antibody**  
**Rabbit mAb**  
**Catalog # AP91113****Specification****SERCA2 Antibody - Product Information**

Application WB, IHC, FC, ICC  
Primary Accession [P16615](#)  
Reactivity Rat  
Clonality Monoclonal  
**Other Names**  
SERCA2; Calcium pump 2; ATP2B;

Isotype Rabbit IgG  
Host Rabbit  
Calculated MW 114757 Da

**SERCA2 Antibody - Additional Information**

Dilution WB~~1:1000  
IHC~~1:100~500  
FC~~1:10~50  
ICC~~N/A  
Purification Affinity-chromatography  
Immunogen A synthesized peptide derived from human SERCA2  
Description This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Isoform 2 is involved in the regulation of the contraction/relaxation cycle.  
Storage Condition and Buffer Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**SERCA2 Antibody - Protein Information**

**Name** ATP2A2 ([HGNC:812](#))

**Synonyms** ATP2B

**Function**

This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen (PubMed:<a href="http://www.uniprot.org/citations/12542527" target="\_blank">12542527</a>, PubMed:<a

[16402920](http://www.uniprot.org/citations/16402920)). Involved in autophagy in response to starvation. Upon interaction with VMP1 and activation, controls ER-isolation membrane contacts for autophagosome formation (PubMed:[28890335](http://www.uniprot.org/citations/28890335)). Also modulates ER contacts with lipid droplets, mitochondria and endosomes (PubMed:[28890335](http://www.uniprot.org/citations/28890335)). In coordination with FLVCR2 mediates heme-stimulated switching from mitochondrial ATP synthesis to thermogenesis (By similarity).

#### Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:O55143}; Multi-pass membrane protein. Sarcoplasmic reticulum membrane; Multi-pass membrane protein. Note=Colocalizes with FLVCR2 at the mitochondrial-ER contact junction. {ECO:0000250|UniProtKB:O55143}

#### Tissue Location

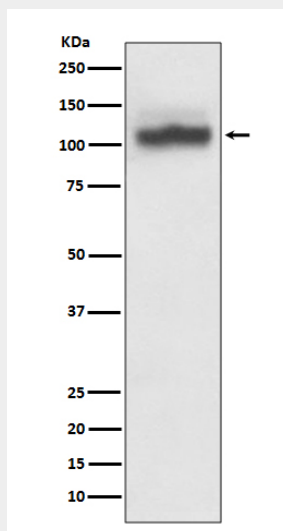
Isoform 1 is widely expressed in smooth muscle and nonmuscle tissues such as in adult skin epidermis, with highest expression in liver, pancreas and lung, and intermediate expression in brain, kidney and placenta. Also expressed at lower levels in heart and skeletal muscle. Isoforms 2 and 3 are highly expressed in the heart and slow twitch skeletal muscle. Expression of isoform 3 is predominantly restricted to cardiomyocytes and in close proximity to the sarcolemma Both isoforms are mildly expressed in lung, kidney, liver, pancreas and placenta. Expression of isoform 3 is amplified during monocytic differentiation and also observed in the fetal heart

#### SERCA2 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 Cytometry](#)
- [Cell Culture](#)

#### SERCA2 Antibody - Images



Western blot analysis of SERCA2 expression in HeLa cell lysate.