

#### SERCA2 ATPase Rabbit mAb

**Catalog # AP76070** 

# **Specification**

# **SERCA2 ATPase Rabbit mAb - Product Information**

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IHC-F, ICC
P16615
Human, Rat
Rabbit
Monoclonal Antibody
114757

## SERCA2 ATPase Rabbit mAb - Additional Information

Gene ID 488

Calculated MW

Other Names ATP2A2

Dilution
WB~~1/500-1/1000
IHC-P~~N/A
IHC-F~~N/A
ICC~~N/A

Format Liquid

## **SERCA2 ATPase Rabbit mAb - Protein Information**

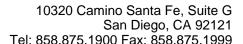
Name ATP2A2 (HGNC:812)

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 href="http://www.uniprot.org/citations/16402920" target="\_blank">16402920</a>). Involved in autophagy in response to starvation. Upon interaction with VMP1 and activation, controls ER-isolation membrane contacts for autophagosome formation (PubMed:<a href="http://www.uniprot.org/citations/28890335" target="\_blank">28890335</a>). Also modulates ER contacts with lipid droplets, mitochondria and endosomes (PubMed:<a href="http://www.uniprot.org/citations/28890335" target="\_blank">28890335</a>). 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 ATPase Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **SERCA2 ATPase Rabbit mAb - Images**

