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Anti-ATP2A2 / SERCA2 Antibody (aa658-671)

Goat Anti Human Polyclonal Antibody
Catalog # ALS17874

Specification

Anti-ATP2A2 / SERCA2 Antibody (aa658-671) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	P16615
Predicted	**Human, Mouse, Rat, Rabbit, Monkey**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**114757**

Anti-ATP2A2 / SERCA2 Antibody (aa658-671) - Additional Information

Gene ID 488

Alias Symbol	**ATP2A2**

Other Names
ATP2A2, ATP2B, Calcium pump 2, DAR, SR Ca(2+)-ATPase 2, Cardiac Ca2+ ATPase, DD, SERCA2

Target/Specificity
Human ATP2A2 / SERCA2. This antibody is expected to recognize both reported isoforms (NP_001672.1; NP_733765.1).

Reconstitution & Storage
Immunoaffinity purified

Precautions
Anti-ATP2A2 / SERCA2 Antibody (aa658-671) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-ATP2A2 / SERCA2 Antibody (aa658-671) - 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:16402920, PubMed:12542527). Involved in autophagy in response to starvation. Upon interaction with VMP1 and activation, controls ER-isolation membrane contacts for autophagosome formation (PubMed:28890335). Also modulates ER contacts with lipid droplets, mitochondria and endosomes (PubMed: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

Anti-ATP2A2 / SERCA2 Antibody (aa658-671) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ATP2A2 / SERCA2 Antibody (aa658-671) - Images