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Anti-ATP2A2 / SERCA2 Antibody (aa658-671)

Goat Anti Human Polyclonal Antibody
Catalog # ALS17874

Product Information

Application	WB, IHC-P, E
Primary Accession	P16615
Predicted	Human, Mouse, Rat, Rabbit, Monkey
Host	Goat
Clonality	Polyclonal
Calculated MW	114757
Concentration (mg/ml)	0.5 mg/ml

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.

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:12542527, PubMed:16402920). 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