

Anti-SERCA2 Antibody

Rabbit polyclonal antibody to SERCA2

Catalog # AP59916

Product Information

Application	WB
Primary Accession	P16615
Other Accession	O55143
Reactivity	Human, Mouse, Rat, Rabbit, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	114757

Additional Information

Gene ID	488
Other Names	ATP2B; Sarcoplasmic/endoplasmic reticulum calcium ATPase 2; SERCA2; SR Ca(2+)-ATPase 2; Calcium pump 2; Calcium-transporting ATPase sarcoplasmic reticulum type, slow twitch skeletal muscle isoform; Endoplasmic reticulum class 1/2 Ca(2+) ATPase
Target/Specificity	Recognizes endogenous levels of SERCA2 protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

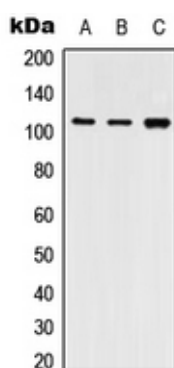
Name	ATP2A2 (HGNC:812)
Synonyms	ATP2B
Function	This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen (PubMed: 12542527 , PubMed: 16402920). Involved in autophagy in response to starvation. Upon interaction 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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SERCA2. The exact sequence is proprietary.

Images



Western blot analysis of SERCA2 expression in THP1 (A), NIH3T3 (B), PC12 (C) whole cell lysates.

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