



Rabbit Anti-ATP2A2 monoclonal antibody, clone KN21-31 (CABT-L902)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	SERCA2
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	KN21-31
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, FC
Molecular Weight	115 kDa
Cellular Localization	Endoplasmic reticulum membrane, Sarcoplasmic reticulum membrane.
Positive Control	A549, MCF-7, Hela, human tonsil tissue, human liver cancer tissue, human kidney tissue, mouse kidney tissue, mouse skeletal muscle tissue, mouse heart tissue, mouse skin tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction	<p>ATP dependent calcium pumps are responsible, in part, for the maintenance of low cytoplasmic free calcium concentrations. The ATP pumps that reside in intracellular organelles are encoded by a family of structurally related enzymes, termed the sarcoplasmic or endoplasmic reticulum calcium (SERCA) ATPases. The sarcoplasmic reticulum of striated muscle is a specialized intracellular membrane system that plays a critical role in the contraction and relaxation of muscle. The SERCAs mediate Ca²⁺ uptake into intracellular stores. SERCA-mediated Ca²⁺ uptake induces and maintains muscular relaxation. The SERCA1 gene is exclusively expressed in type II (fast) skeletal muscle. The SERCA2 gene is subject to tissue-dependent processing which is responsible for the generation of the SERCA2a muscle-specific form expressed in type I (slow) skeletal, cardiac and smooth muscle, and the SERCA2b isoform expressed in all cell types. The SERCA3 gene is not as well characterized and is found in non-muscle cells. SERCA2 plays an important part in regulating cardiac contractile function. SERCA3 is an isoform expressed in several cell types including platelets, lymphoid cells and mast cells. SERCA1, SERCA2 and SERCA3 all undergo alternative splicing.</p>
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Keywords	<p>AT2A2_HUMAN;Atp2a2;ATP2B;ATPase Ca⁺⁺ transporting cardiac muscle slow twitch 2;Calcium pump 2;Calcium-transporting ATPase sarcoplasmic reticulum type;Calcium-transporting ATPase sarcoplasmic reticulum type slow twitch skeletal muscle isoform;Cardiac Ca²⁺ ATPase;DAR;DD;Endoplasmic reticulum class 1/2 Ca(2+) ATPase;MGC45367;Sarcoplasmic/endoplasmic reticulum calcium ATPase 2;SERCA 2;SERCA2;serca2a;slow twitch skeletal muscle isoform;SR Ca(2+)-ATPase 2 antibody</p>
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GENE INFORMATION

Entrez Gene ID	2100
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