

Product datasheet

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ARG58304 anti-ATP2A1 / SERCA1 ATPase antibody

Package: 50 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes ATP2A1 / SERCA1 ATPase

Tested Reactivity Hu, Rat
Predict Reactivity Hm

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name ATP2A1 / SERCA1 ATPase

Species Human

Immunogen Synthetic peptide corresponding to a sequence in the middle region of Human SERCA1

ATPase(665-680aa EQREACRRACCFARVE), identical to the related Rat and Mouse sequences.

Conjugation Un-conjugated

Alternate Names SERCA1; ATP2A; SR Ca; Endoplasmic reticulum class 1/2 Ca; EC 3.6.3.8; Sarcoplasmic/endoplasmic

reticulum calcium ATPase 1; Calcium pump 1; Calcium-transporting ATPase sarcoplasmic reticulum

type, fast twitch skeletal muscle isoform; 2+

Application Instructions

Application table	Application	Dilution
	IHC-P	0.5 - 1 μg/ml
	WB	0.1 - 0.5 μg/ml
	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Thimerosal and 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol ATP2A1

Gene Full Name ATPase, Ca++ transporting, cardiac muscle, fast twitch 1

Background This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the

sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in muscular excitation and contraction. Mutations in this gene cause some autosomal

recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise. Alternative splicing results in three transcript variants encoding different isoforms. [provided

by RefSeq, Oct 2013]

Function Key regulator of striated muscle performance by acting as the major Ca(2+) ATPase responsible for the

reuptake of cytosolic Ca(2+) into the sarcoplasmic reticulum. Catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Contributes to

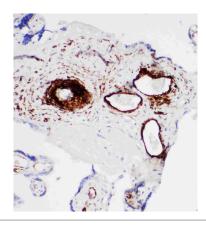
calcium sequestration involved in muscular excitation/contraction. [UniProt]

Calculated Mw 110 kDa

Cellular Localization Endoplasmic reticulum membrane; Multi-pass membrane protein. Sarcoplasmic reticulum membrane;

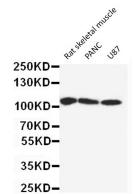
Multi-pass membrane protein. [UniProt]

Images



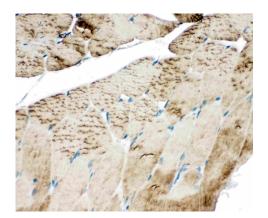
ARG58304 anti-ATP2A1 / SERCA1 ATPase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta stained with ARG58304 anti-ATP2A1 / SERCA1 ATPase antibody.



ARG58304 anti-ATP2A1 / SERCA1 ATPase antibody WB image

Western blot: Rat skeletal muscle, PANC and U87 lysates stained with ARG58304 anti-ATP2A1 / SERCA1 ATPase antibody.



ARG58304 anti-ATP2A1 / SERCA1 ATPase antibody IHC-P image

 $Immun ohistochem is try: Paraffin-embedded\ Rat\ skeletal\ muscle stained\ with\ ARG58304\ anti-ATP2A1\ /\ SERCA1\ ATPase\ antibody.$