

Product datasheet

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ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes ATP2A1 / SERCA1 ATPase (isoform b)

Tested Reactivity Hu
Predict Reactivity Rb

Tested Application FACS, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name ATP2A1 / SERCA1 ATPase (isoform b)

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 974-1001 of Human ATP2A1 / SERCA1 ATPase

(isoform b).

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
	FACS	1:10 - 1:50
	IHC-P	1:50 - 1:100
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HT1080	

Properties

Form Liquid

Purification Purification with Protein A and immunogen peptide.

Buffer PBS and 0.09% (W/V) Sodium azide.

Preservative 0.09% (W/V) Sodium azide.

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

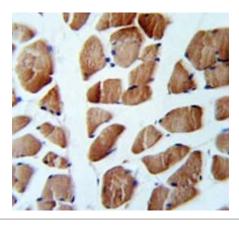
calcium sequestration involved in muscular excitation/contraction. [UniProt]

Calculated Mw 110 kDa

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

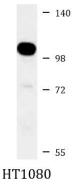
Multi-pass membrane protein. [UniProt]

Images



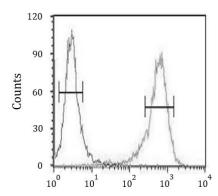
ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human skeletal muscle stained with ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody.



ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody WB image

Western blot: 35 μg of HT1080 cell lysate stained with ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody at 1:1000 dilution.



ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody FACS image

Flow Cytometry: K562 cells stained with ARG58285 anti-ATP2A1 / SERCA1 ATPase (isoform b) antibody (right histogram) or without primary antibody as control (left histogram), followed by incubation with FITC labelled secondary antibody.