

ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ATP2A1 / SERCA1 ATPase
Tested Reactivity	Ms, Rat
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 at the N-terminus of Human SERCA1 ATPase (1-32aa MEAAHAKTTEECLAYFGVSETTGLTPDQVKRN), different from the related Mouse and Rat sequences by three amino acids.
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

Application Note 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% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	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.

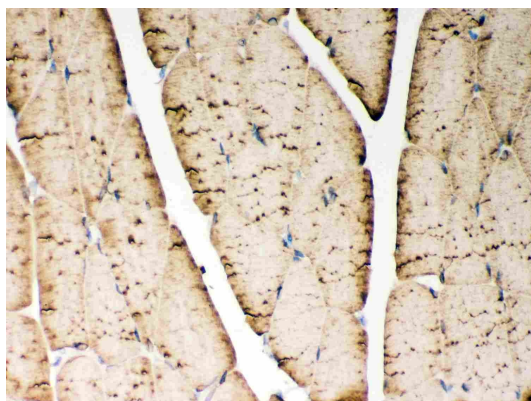
Note

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

Bioinformation

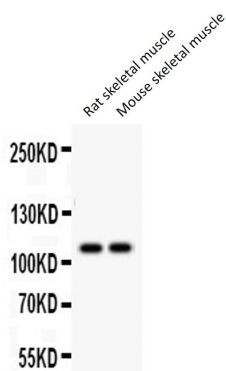
Gene Symbol	ATP2A1
Gene Full Name	ATPase, Ca ⁺⁺ transporting, cardiac muscle, fast twitch 1
Background	This gene encodes one of the SERCA Ca ⁽²⁺⁾ -ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled 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



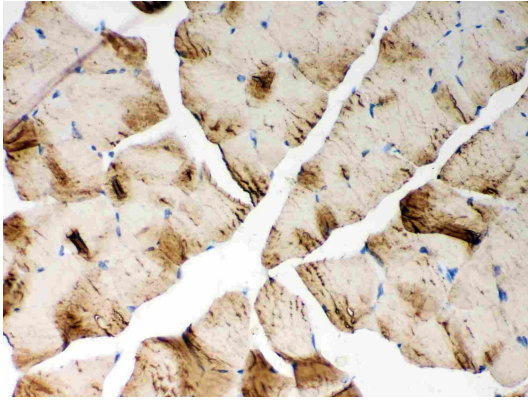
ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat skeletal muscle stained with ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody.



ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody WB image

Western blot: 50 µg of Rat skeletal muscle and Mouse skeletal muscle lysates stained with ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody at 0.5 µg/ml dilution.



ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse skeletal muscle stained with ARG58315 anti-ATP2A1 / SERCA1 ATPase antibody.