

SERCA1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51003

Product Information

Application	WB, IP, IHC-P
Primary Accession	O14983
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110252

Additional Information

Gene ID	487
Other Names	Sarcoplasmic/endoplasmic reticulum calcium ATPase 1, SERCA1, SR Ca(2+)-ATPase 1, Calcium pump 1, Calcium-transporting ATPase sarcoplasmic reticulum type, fast twitch skeletal muscle isoform, Endoplasmic reticulum class 1/2 Ca(2+) ATPase, ATP2A1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SERCA1. The exact sequence is proprietary.
Dilution	WB~~1:1000 IP~~N/A IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ATP2A1 (HGNC:811)
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 (By similarity). Contributes to calcium sequestration involved in muscular excitation/contraction (PubMed: 10914677).
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250 UniProtKB:P04191}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P04191}; Sarcoplasmic reticulum membrane {ECO:0000250 UniProtKB:P04191}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P04191}
Tissue Location	Skeletal muscle, fast twitch muscle (type II) fibers.

Background

This magnesium-dependent enzyme 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.

References

Zhang Y.,et al.Genomics 30:415-424(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Daiho T.,et al.J. Biol. Chem. 276:32771-32778(2001).
Odermatt A.,et al.Hum. Genet. 106:482-491(2000).

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