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ATP2A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4905b

Specification

ATP2A1 Antibody (C-term) - Product Information

Application	**WB, FC, IHC-P,E**
Primary Accession	O14983
Other Accession	P04191
Reactivity	**Human**
Predicted	**Rabbit**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**110252**
Antigen Region	**974-1001**

ATP2A1 Antibody (C-term) - 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
This ATP2A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 974-1001 amino acids from the C-terminal region of human ATP2A1.

Dilution
WB~~1:1000
FC~~1:10~50
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ATP2A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP2A1 Antibody (C-term) - Protein Information

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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}

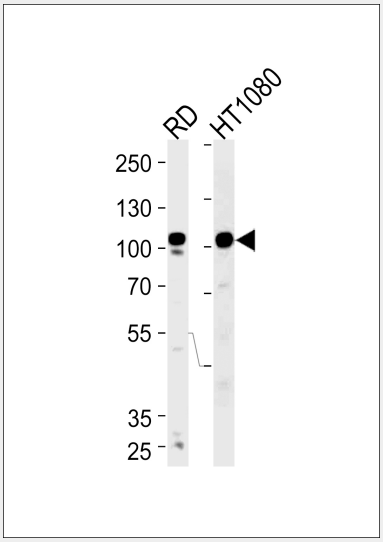
Tissue Location
Skeletal muscle, fast twitch muscle (type II) fibers.

ATP2A1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATP2A1 Antibody (C-term) - Images



Western blot analysis of lysates from RD,HT1080 cell line (from left to right),using ATP2A1 Antibody (C-term)(Cat. #AP4905b).AP4905b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

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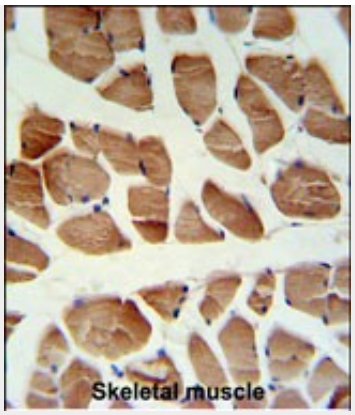
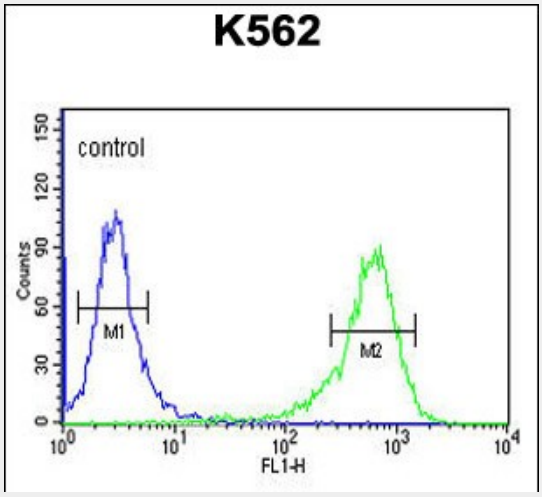


ATP2A1 Antibody (C-term) (Cat. #AP4905b) IHC analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ATP2A1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



ATP2A1 Antibody (C-term) (Cat. #AP4905b) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ATP2A1 Antibody (C-term) - Background

ATP2A1 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.

ATP2A1 Antibody (C-term) - References

Salanova, M., et al. Histochem. Cell Biol. 132(4):383-394(2009)
Thorleifsson, G., et al. Nat. Genet. 41(1):18-24(2009)
Chami, M., et al. Mol. Cell 32(5):641-651(2008)