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ATP2A1 / SERCA1 Antibody (clone 1B11)

Mouse Monoclonal Antibody
Catalog # ALS13278

Specification

ATP2A1 / SERCA1 Antibody (clone 1B11) - Product Information

Application	**WB, IF, IHC**
Primary Accession	O14983
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**110kDa KDa**

ATP2A1 / SERCA1 Antibody (clone 1B11) - Additional Information

Gene ID 487

Other Names
Sarcoplasmic/endoplasmic reticulum calcium ATPase 1, SERCA1, SR Ca(2+)-ATPase 1, 3.6.3.8, Calcium pump 1, Calcium-transporting ATPase sarcoplasmic reticulum type, fast twitch skeletal muscle isoform, Endoplasmic reticulum class 1/2 Ca(2+) ATPase, ATP2A1

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
ATP2A1 / SERCA1 Antibody (clone 1B11) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP2A1 / SERCA1 Antibody (clone 1B11) - 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

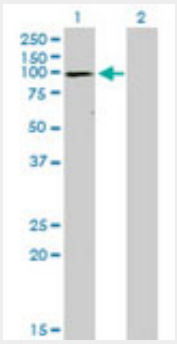
Skeletal muscle, fast twitch muscle (type II) fibers.

ATP2A1 / SERCA1 Antibody (clone 1B11) - Protocols

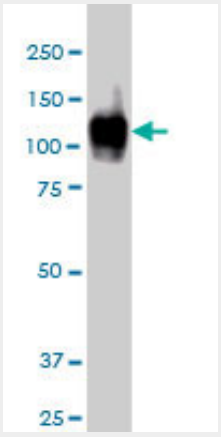
Provided below are standard protocols that you may find useful for product applications.

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

ATP2A1 / SERCA1 Antibody (clone 1B11) - Images

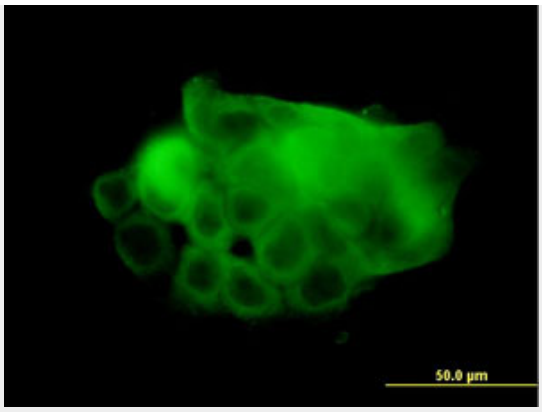


Western blot of ATP2A1 expression in transfected 293T cell line by ATP2A1 monoclonal antibody,...

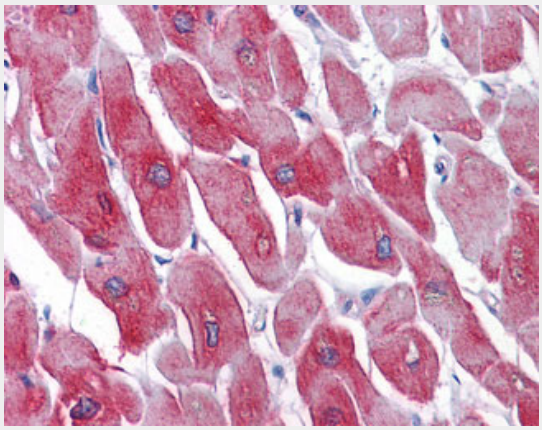


ATP2A1 monoclonal antibody, clone 1B11 Western blot of ATP2A1 expression in A-431.

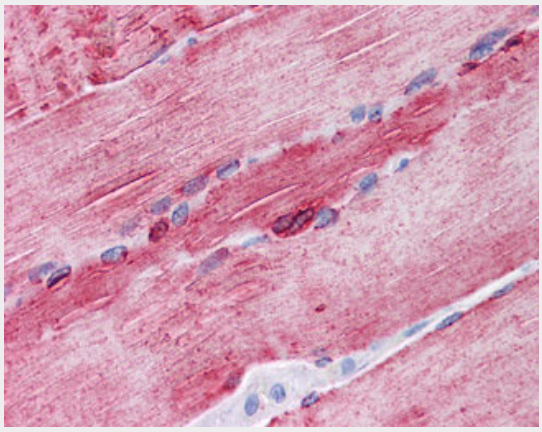
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Immunofluorescence of monoclonal antibody to ATP2A1 on A-431 cell (antibody concentration 10 ug/ml).



Anti-SERCA1 antibody IHC of human heart.



Anti-SERCA1 antibody IHC of human skeletal muscle.

ATP2A1 / SERCA1 Antibody (clone 1B11) - 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.

ATP2A1 / SERCA1 Antibody (clone 1B11) - References

Zhang Y.,et al.Genomics 30:415-424(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Martin J.,et al.Nature 432:988-994(2004).
Daiho T.,et al.J. Biol. Chem. 276:32771-32778(2001).
Odermatt A.,et al.Hum. Genet. 106:482-491(2000).