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ATP2A1
Purified Mouse Monoclonal Antibody
Catalog # AO2540a

Specification

ATP2A1 - Product Information

Application	**E, WB**
Primary Accession	O14983
Reactivity	**Human, Mouse, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**110kDa KDa**

Immunogen
Purified recombinant fragment of human ATP2A1 (AA: 487-631) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

ATP2A1 - Additional Information

Gene ID 487

Other Names
ATP2A; SERCA1

Dilution
E~~ 1/10000
WB~~ 1/500 - 1/2000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ATP2A1 is for research use only and not for use in diagnostic or therapeutic procedures.

ATP2A1 - 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:<a href="http://www.uniprot.org/citations/10914677"

target="_blank">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 - 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 - Images

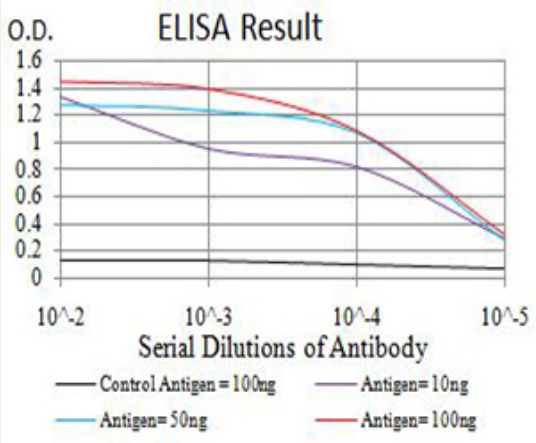

Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

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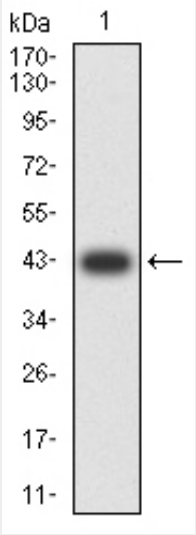

Figure 2:Western blot analysis using ATP2A1 mAb against human ATP2A1 (AA: 487-631) recombinant protein. (Expected MW is 42 kDa)

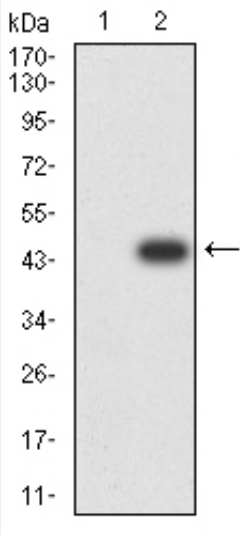

Figure 3:Western blot analysis using ATP2A1 mAb against HEK293 (1) and ATP2A1 (AA: 487-631)-hIgGFc transfected HEK293 (2) cell lysate.

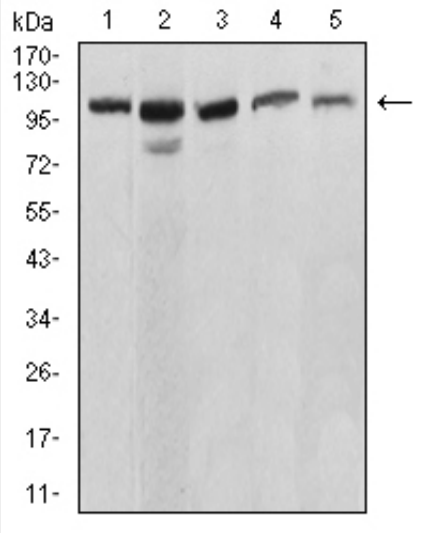

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Figure 4:Western blot analysis using ATP2A1 mouse mAb against C2C12 (1), COS7 (2), Hela (3), K562 (4), and Jurkat (5) cell lysate.

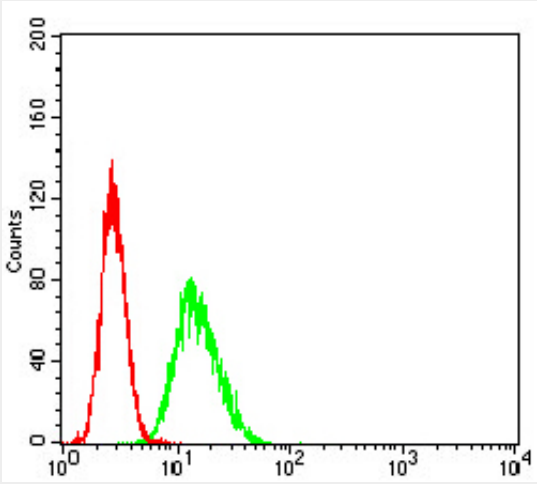

Figure 5:Flow cytometric analysis of HeLa cells using ATP2A1 mouse mAb (green) and negative control (red).

ATP2A1 - References

1.Biochem Biophys Res Commun. 2012 Jun 29;423(2):212-7.2.Mol Genet Metab. 2013 Sep-Oct;110(1-2):162-9.