

# ATP2A1

Purified Mouse Monoclonal Antibody  
Catalog # AO2540a

## Product Information

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<b>Application</b>	WB, IHC, ICC, E
<b>Primary Accession</b>	<a href="#">O14983</a>
<b>Reactivity</b>	Human, Mouse, Monkey
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	3D1H6
<b>Isotype</b>	Mouse IgG1
<b>Calculated MW</b>	110252
<b>Immunogen</b>	Purified recombinant fragment of human ATP2A1 (AA: 487-631) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide

## Additional Information

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<b>Gene ID</b>	487
<b>Other Names</b>	ATP2A; SERCA1
<b>Dilution</b>	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
<b>Storage</b>	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.
<b>Precautions</b>	ATP2A1 is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ATP2A1 ( <a href="#">HGNC:811</a> )
<b>Function</b>	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="#">10914677</a> ).
<b>Cellular Location</b>	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.

## 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.

## Images

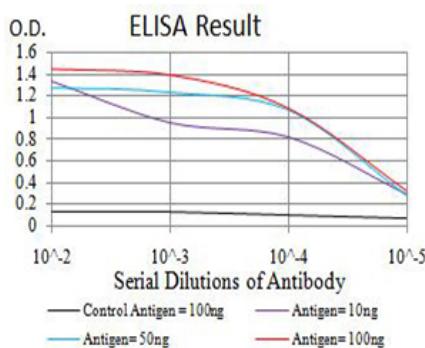


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

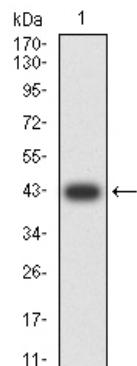


Figure 2: Western blot analysis using ATP2A1 mAb against human ATP2A1 (AA: 487-631) recombinant protein. (Expected MW is 42 kDa)

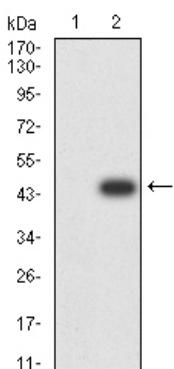


Figure 3: Western blot analysis using ATP2A1 mAb against HEK293 (1) and ATP2A1 (AA: 487-631)-hIgGFc transfected HEK293 (2) cell lysate.

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

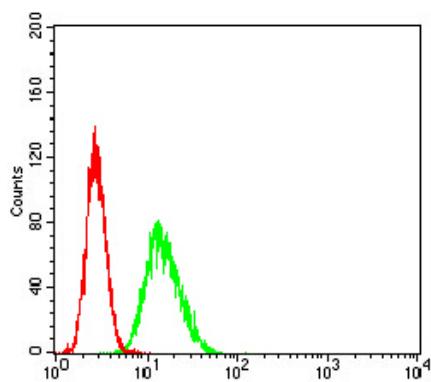
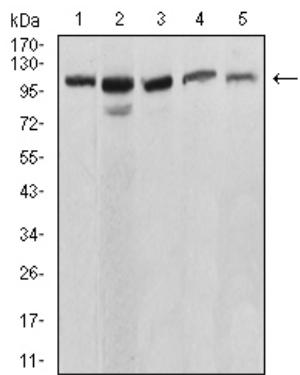


Figure 5: Flow cytometric analysis of HeLa cells using ATP2A1 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.