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ATP2A1

Purified Mouse Monoclonal Antibody
Catalog # AO2540a

Product Information

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

Additional Information

Gene ID	487
Other Names	ATP2A; SERCA1
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
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.

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.

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

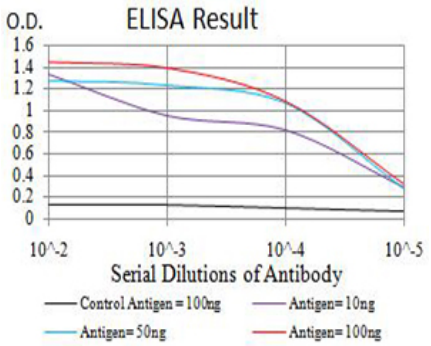


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

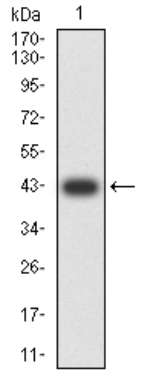


Figure 2:Western blot analysis using ATP2A1 mAb against human ATP2A1 (AA: 487-631) recombinant protein. (Expected MW is 42 kDa)

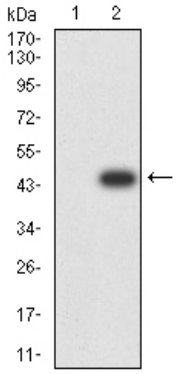
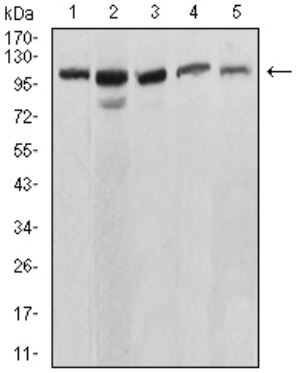


Figure 3:Western blot analysis using ATP2A1 mAb against HEK293 (1) and ATP2A1 (AA: 487-631)-hIgGFc transfected HEK293 (2) cell lysate.

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



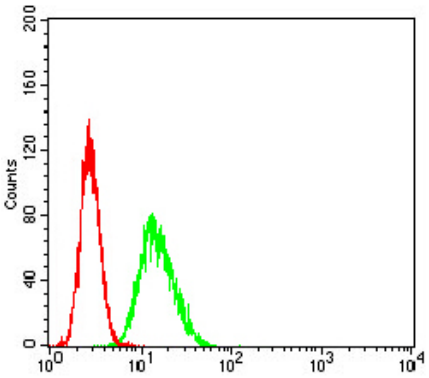


Figure 5:Flow cytometric analysis of HeLa cells using ATP2A1 mouse mAb (green) and negative control (red).