
Product Name: ATP1A1 Mouse Monoclonal Antibody**Catalog #: AMM82660**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2a
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	112.8kDa

Antigen Information

Gene Name	ATP1A1
Alternative Names	CMT2DD; HOMGSMR2
Gene ID	476.0
SwissProt ID	P05023
Immunogen	Purified recombinant fragment of human ATP1A1 (AA: 153-288) expressed in E. Coli.

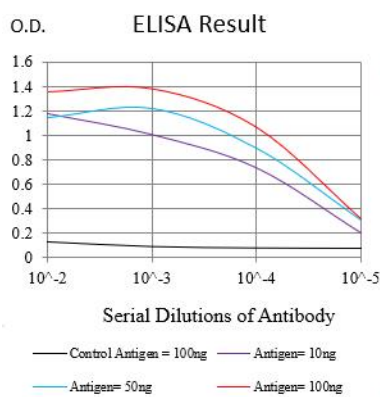
Background

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺ -ATPases. Na⁺/K⁺ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled

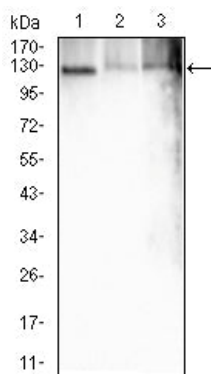
transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na⁺/K⁺ -ATPase is encoded by multiple genes. This gene encodes an alpha 1 subunit. Multiple transcript variants encoding different isoforms have been found for this gene.

Research Area

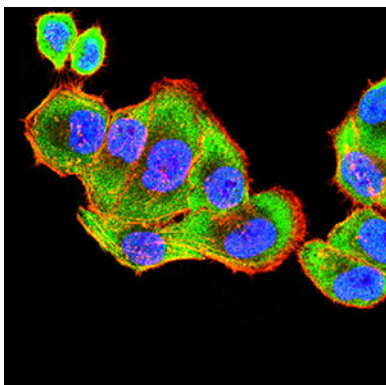
Image Data



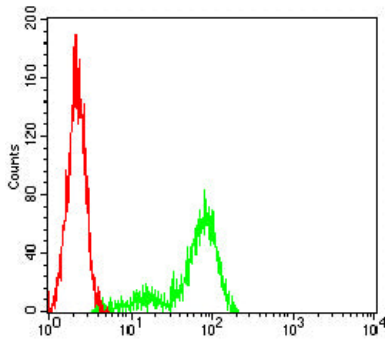
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



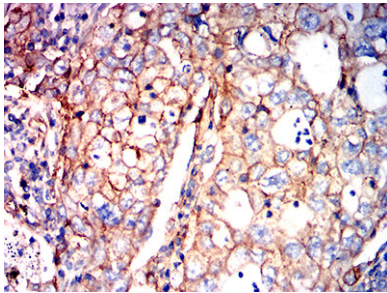
Western blot analysis using ATP1A1 mouse mAb against HeLa (1), HepG2 (2), and A431 (3) cell lysate.



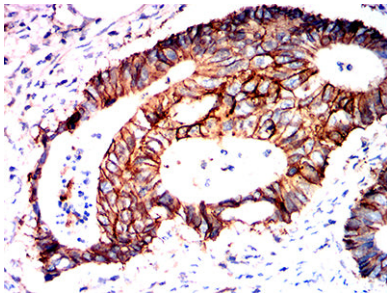
Immunofluorescence analysis of HeLa cells using ATP1A1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Flow cytometric analysis of HeLa cells using ATP1A1 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissues using ATP1A1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human rectum cancer tissues using ATP1A1 mouse mAb with DAB staining.