10320 Camino Santa Fe, Suite G
San Diego, CA 92121
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Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody

Catalog # ABO14296

Specification

Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	P05023
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 476

Other Names
Sodium/potassium-transporting ATPase subunit alpha-1, Na(+)/K(+) ATPase alpha-1 subunit, 7.2.2.13, Sodium pump subunit alpha-1, ATP1A1

Calculated MW
112896 MW KDa

Application Details
WB 1:5000-1:10000
IHC 1:50-1:100
ICC/IF 1:50-1:200
FC 1:50

Subcellular Localization
Cell membrane; Multi-pass membrane protein. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human Sodium Potassium ATPase

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated**

freeze-thaw cycles.

Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - Protein Information

Name ATP1A1

Function
This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients (PubMed:29499166, PubMed:30388404). Could also be part of an osmosensory signaling pathway that senses body-fluid sodium levels and controls salt intake behavior as well as voluntary water intake to regulate sodium homeostasis (By similarity).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:Q8VDN2}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P06685}. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - 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

Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - Images

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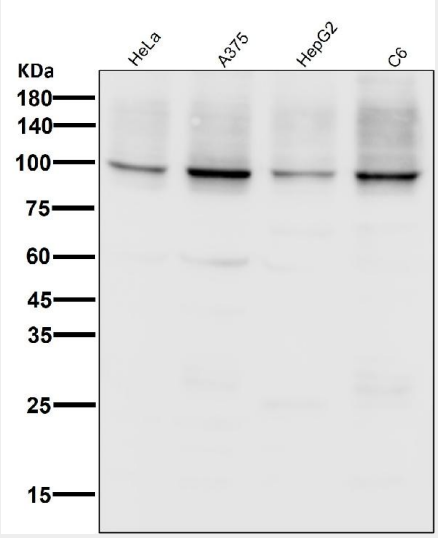
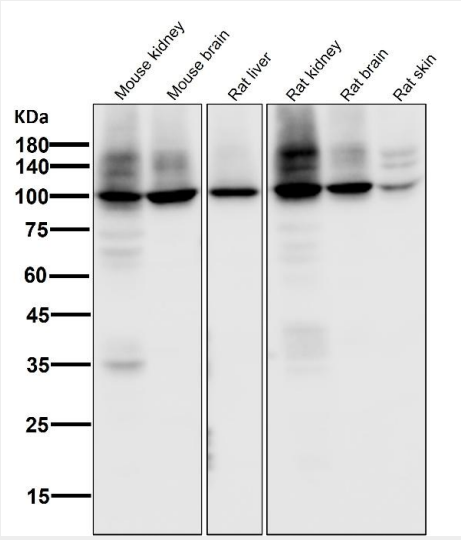
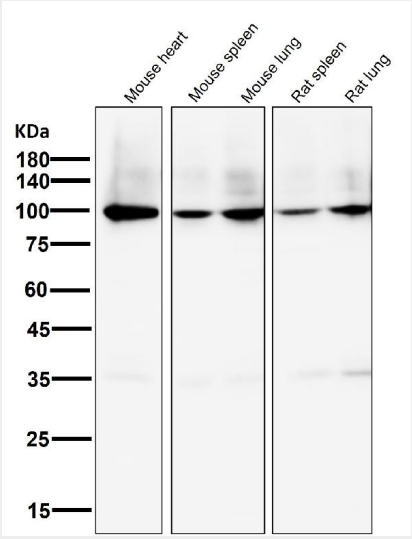


All lanes use the Antibody at 1:5W dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:5W dilution for 1 hour at room temperature.



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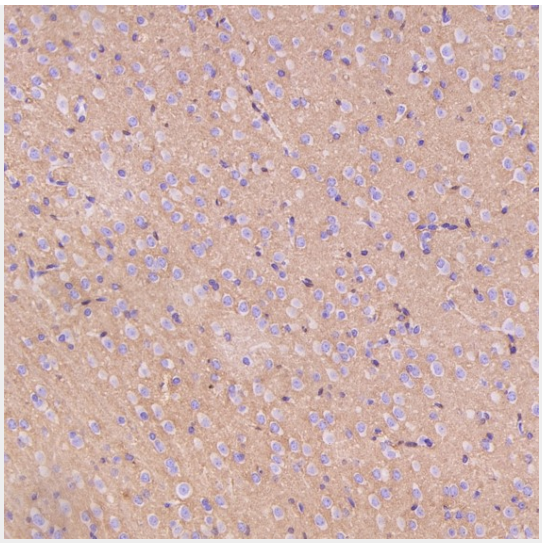
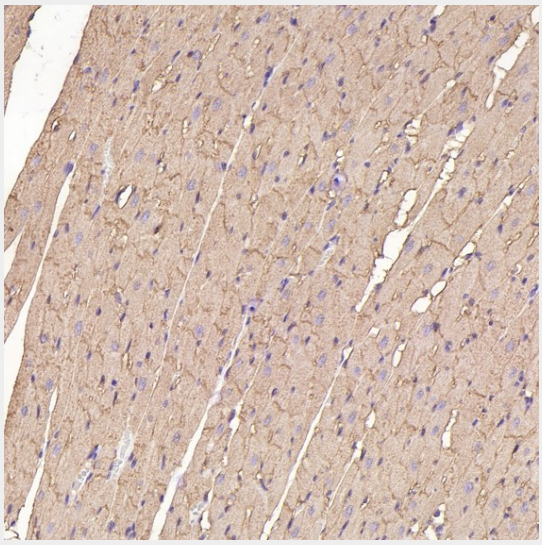
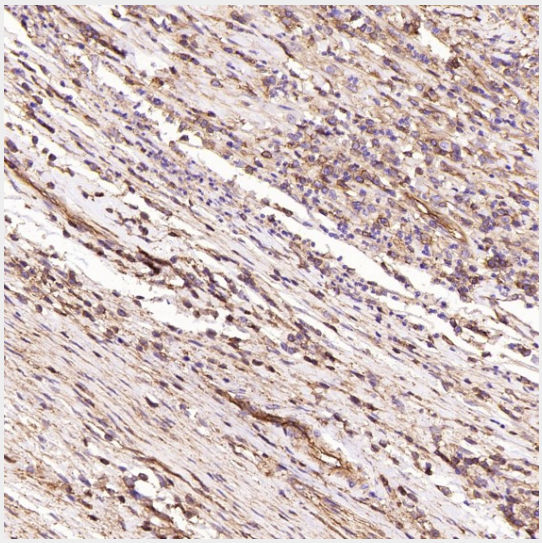


Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Rat heart, using the Antibody at 1:100 dilution.



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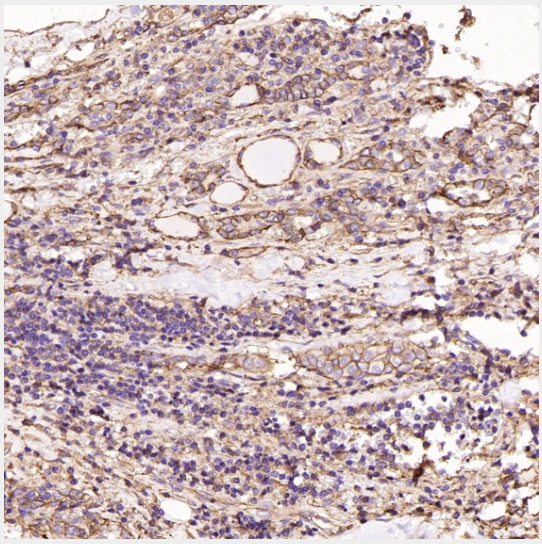
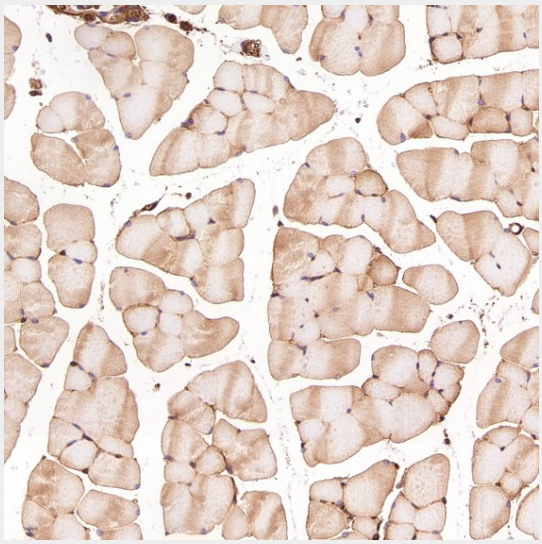
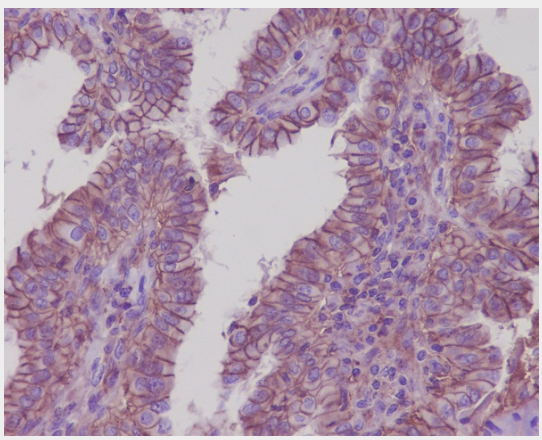
Immunohistochemical analysis of paraffin-embedded Human cervical cancer, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Human thyroid cancer, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle - gastrocnemius , using the Antibody at 1:100 dilution.



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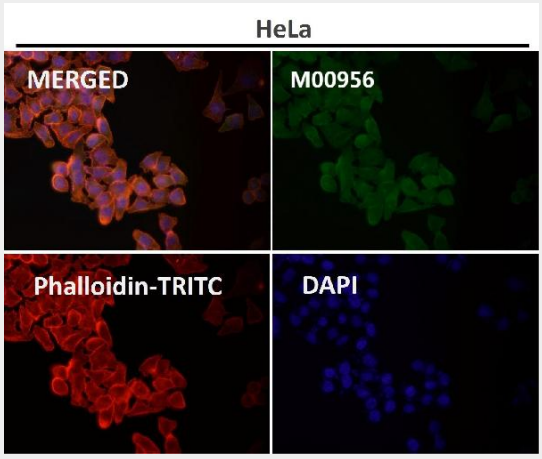
Immunohistochemical analysis of paraffin-embedded human thyroid carcinoma, using Sodium Potassium ATPase Antibody.



Immunofluorescent analysis using the Antibody at 1:50 dilution.