

**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	<a href="#">P05023</a>
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<br>IHC 1:50-1:100<br>ICC/IF 1:50-1:200<br>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:<a href="http://www.uniprot.org/citations/29499166" target="\_blank">29499166</a>, PubMed:<a href="http://www.uniprot.org/citations/30388404" target="\_blank">30388404</a>). 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

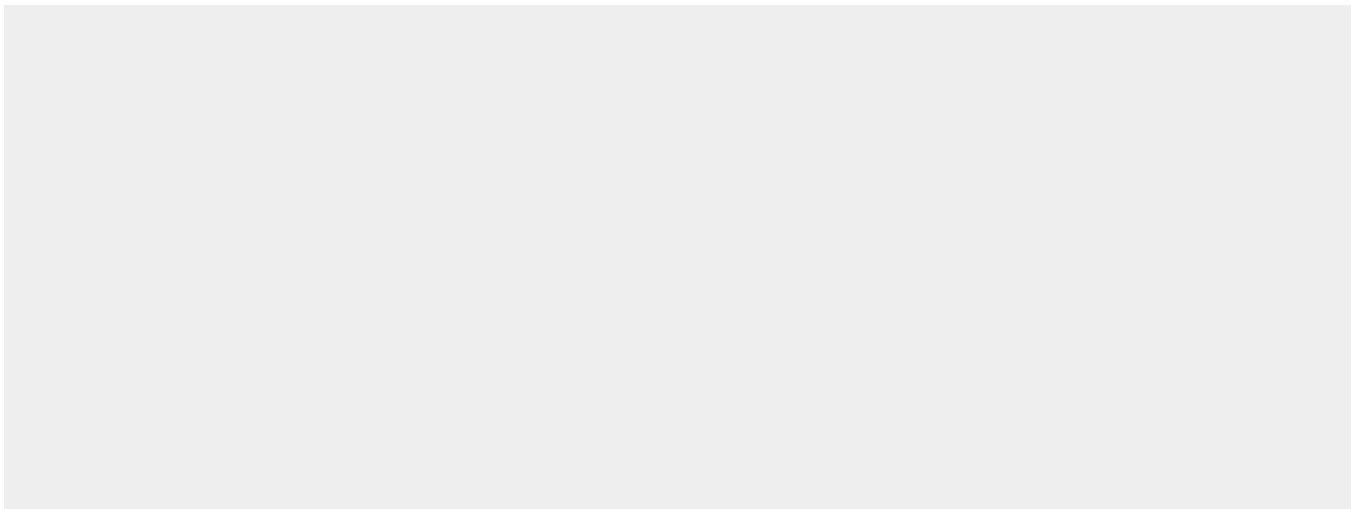
Cell membrane {ECO:0000250|UniProtKB:Q8VDN2}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P06685}. Melanosome. Note=Identified by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

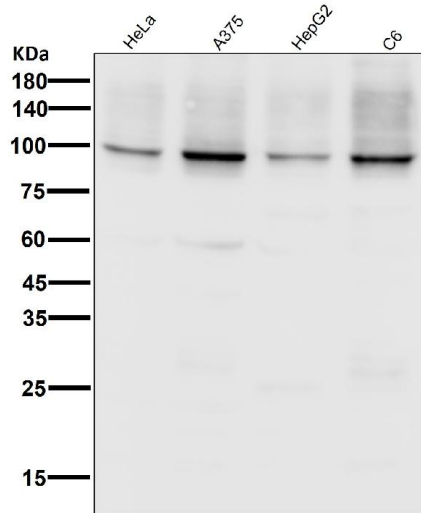
### Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

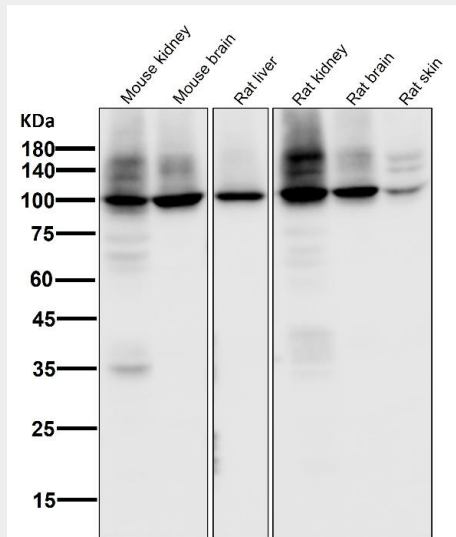
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Sodium Potassium ATPase ATP1A1 Rabbit Monoclonal Antibody - Images

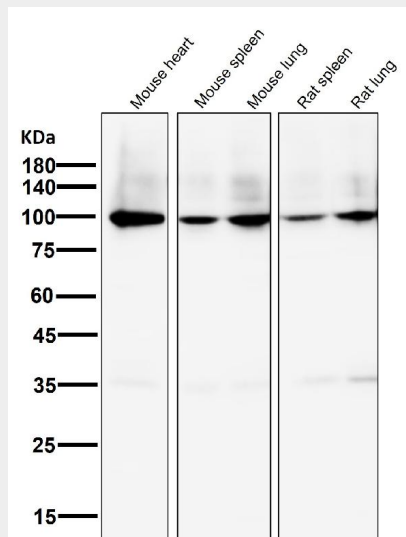




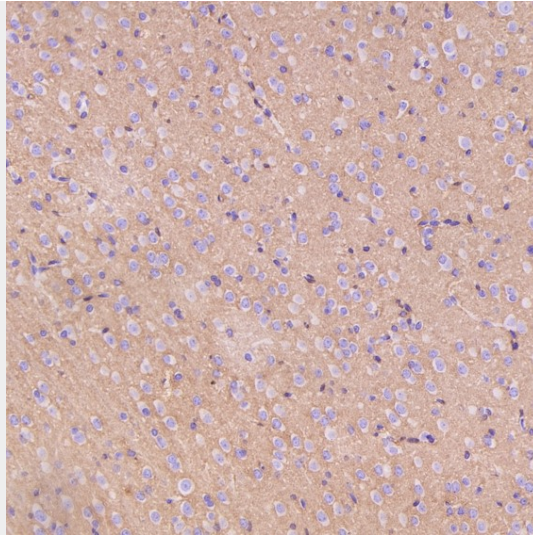
All lanes use the Antibody at 1:5W dilution for 1 hour at room temperature.



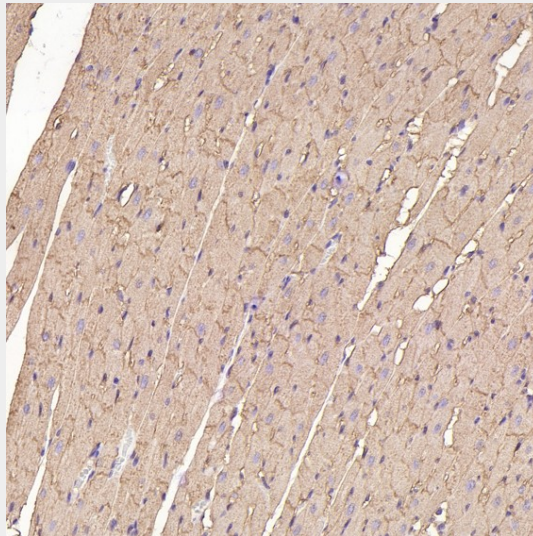
All lanes use the Antibody at 1:5W dilution for 1 hour at room temperature.



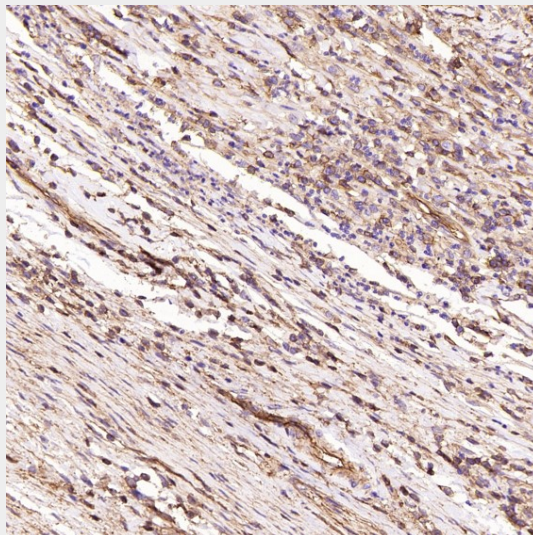
All lanes use the Antibody at 1:5W dilution for 1 hour at room temperature.



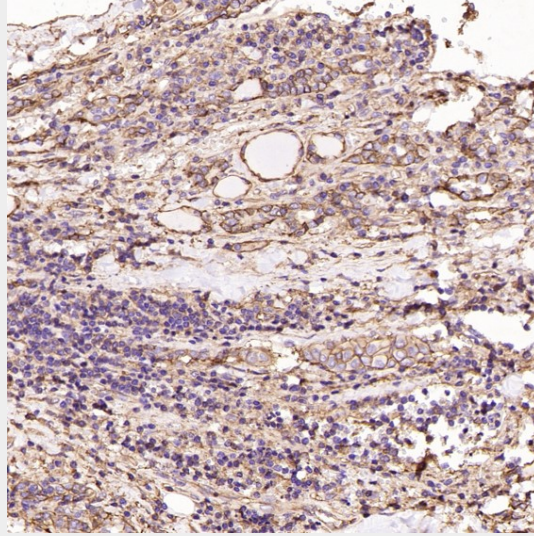
Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex, using the Antibody at 1:100 dilution.



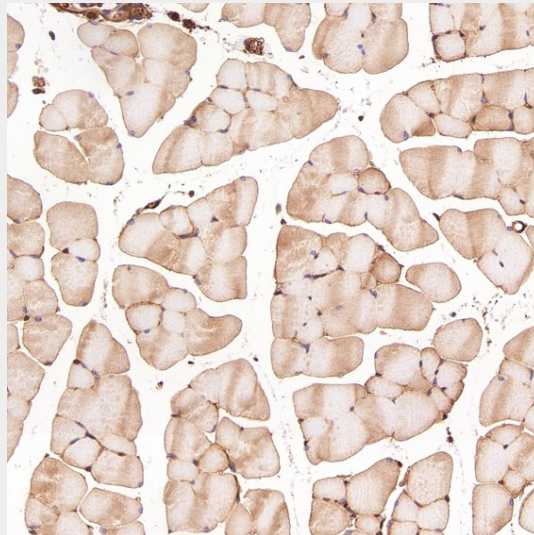
Immunohistochemical analysis of paraffin-embedded Rat heart, using the Antibody at 1:100 dilution.



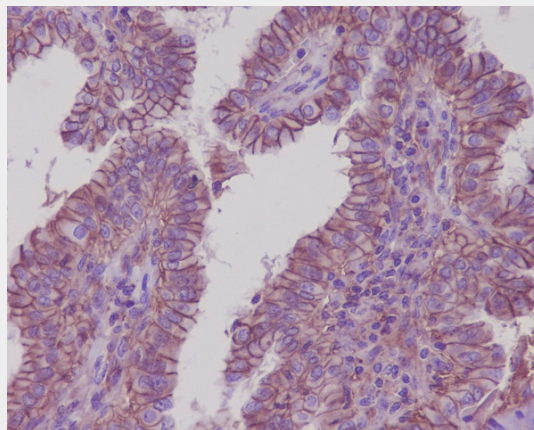
Immunohistochemical analysis of paraffin-embedded Human cervical cancer, using the Antibody at 1:100 dilution.



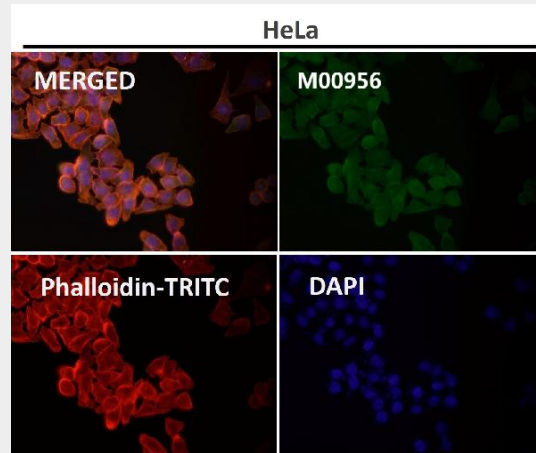
Immunohistochemical analysis of paraffin-embedded Human thyroid cancer, using the Antibody at 1:100 dilution.



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



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



Immunofluorescent analysis using the Antibody at 1:50 dilution.