

## Na+/K+-ATPase α1 Polyclonal Antibody

**Catalog # AP71156** 

#### **Specification**

## Na+/K+-ATPase α1 Polyclonal Antibody - Product Information

**Application Primary Accession** 

Reactivity Host Clonality

WB, IHC-P, IF

P05023

Human, Mouse, Rat

Rabbit **Polyclonal** 

## Na+/K+-ATPase α1 Polyclonal Antibody - Additional Information

#### Gene ID 476

#### **Other Names**

ATP1A1; Sodium/potassium-transporting ATPase subunit alpha-1; Na(+)/K(+) ATPase alpha-1 subunit; Sodium pump subunit alpha-1

#### Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

## **Storage Conditions**

-20°C

### Na+/K+-ATPase α1 Polyclonal 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



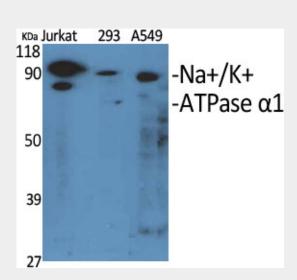
membrane {ECO:0000250|UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P06685}. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

# Na+/K+-ATPase α1 Polyclonal Antibody - Protocols

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

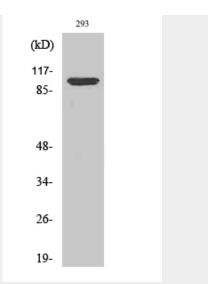
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Na+/K+-ATPase α1 Polyclonal Antibody - Images



Western Blot analysis of various cells using Na+/K+-ATPase  $\alpha 1$  Polyclonal Antibody diluted at  $1 \square 1000$ 





Western Blot analysis of 293 cells using Na+/K+-ATPase α1 Polyclonal Antibody diluted at 1□1000

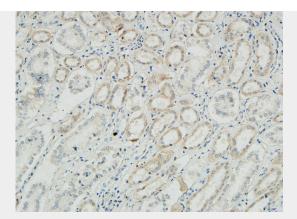


Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).





Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

# Na+/K+-ATPase α1 Polyclonal Antibody - Background

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.