

Na+/K+-ATPase α1 Polyclonal Antibody

Catalog # AP71156

Product Information

Application WB, IHC-P, IF **Primary Accession** P05023

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW112896

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~~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. IF~~1:50~200

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

azide.

Storage Conditions -20°C

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).

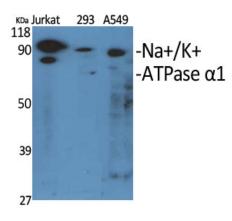
Cellular Location Cell membrane {ECO:0000250 | UniProtKB:Q8VDN2}; Multi-pass membrane

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

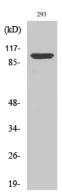
Background

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.

Images



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



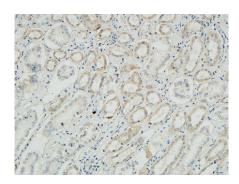
Western Blot analysis of 293 cells using Na+/K+-ATPase α1 Polyclonal Antibody diluted at 1 : 1000



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.