

NaK ATPase Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22131a

Specification

NaK ATPase Antibody - Product Information

WB,E Application **Primary Accession** P05023 Other Accession O5RDR3 Reactivity Human Host **Rabbit** Clonality polyclonal Isotype Rabbit IgG Calculated MW 112896

NaK ATPase Antibody - Additional Information

Gene ID 476

Other Names

Sodium/potassium-transporting ATPase subunit alpha-1, Na(+)/K(+) ATPase alpha-1 subunit, 3.6.3.9, Sodium pump subunit alpha-1, ATP1A1

Target/Specificity

This NaK ATPase antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 12-46 amino acids from human NaK ATPase.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

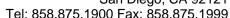
Precautions

NaK ATPase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NaK ATPase 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

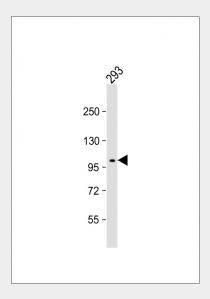
Cell membrane {ECO:0000250|UniProtKB:Q8VDN2}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P06685}. Melanosome. Note=Identified by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

NaK ATPase 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

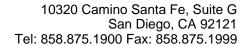
NaK ATPase Antibody - Images



Anti-NaK ATPase Antibody at 1:2000 dilution + 293 whole cell lysate Lysates/proteins at 20 μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 113 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

NaK ATPase 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.

NaK ATPase Antibody - References

Kawakami K.,et al.J. Biochem. 100:389-397(1986). Ruiz A.,et al.Gene 155:179-184(1995). Ota T.,et al.Nat. Genet. 36:40-45(2004). Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.