

**NaK ATPase Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22131a**

## Specification

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### NaK ATPase Antibody - Product Information

Application	WB,E
Primary Accession	<a href="#">P05023</a>
Other Accession	<a href="#">Q5RDR3</a>
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

#### 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

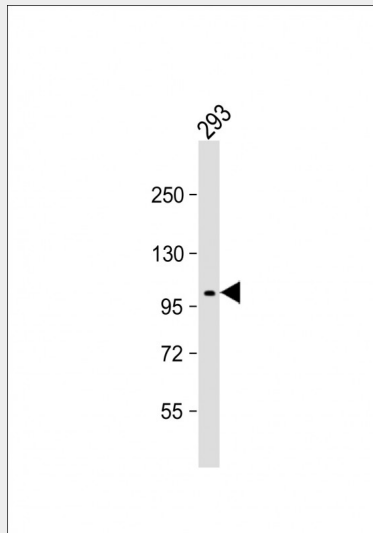
Cell membrane {ECO:0000250|UniProtKB:Q8VDN2}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P06685}. Melanosome. Note=Identified by 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 Cytometry](#)
- [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.