

**NaK ATPase Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP22131a****Specification**

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**NaK ATPase Blocking Peptide - Product Information**

Primary Accession [P05023](#)  
Other Accession [Q5RDR3](#)

**NaK ATPase Blocking Peptide - 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**

The synthetic peptide sequence is selected from aa 22-36 of HUMAN ATP1A1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**NaK ATPase Blocking Peptide - 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

### **NaK ATPase Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **NaK ATPase Blocking Peptide - Images**

### **NaK ATPase Blocking Peptide - Background**

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### **NaK ATPase Blocking Peptide - References**

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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.