

Rat Atp1a1 Blocking Peptide (N-term S23) Synthetic peptide

Catalog # BP20549a

Specification

Rat Atp1a1 Blocking Peptide (N-term S23) - Product Information

Primary Accession

<u>P06685</u>

Rat Atp1a1 Blocking Peptide (N-term S23) - Additional Information

Gene ID 24211

Other Names

Sodium/potassium-transporting ATPase subunit alpha-1, Na(+)/K(+) ATPase alpha-1 subunit, Sodium pump subunit alpha-1, Atp1a1

Target/Specificity

The synthetic peptide sequence is selected from aa 16-30 of RAT 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.

Rat Atp1a1 Blocking Peptide (N-term S23) - 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: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; Multi-pass membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P05023}; Multi-pass membrane protein. Cell projection, axon

Melanosome {ECO:0000250|UniProtKB:P05023}



Tissue Location

Expressed in the central nervous system, in most motor and sensory axons of the ventral and dorsal roots, as well as in the large motor neurons of the ventral horn (at protein level)

Rat Atp1a1 Blocking Peptide (N-term S23) - Protocols

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

- <u>Blocking Peptides</u>
- Rat Atp1a1 Blocking Peptide (N-term S23) Images

Rat Atp1a1 Blocking Peptide (N-term S23) - Background

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Rat Atp1a1 Blocking Peptide (N-term S23) - References

Shull G.E., et al. Biochemistry 25:8125-8132(1986). Hara Y., et al. J. Biochem. 102:43-58(1987). Herrera V.L.M., et al. J. Cell Biol. 105:1855-1865(1987). Lubec G., et al. Submitted (JUL-2007) to UniProtKB. Schneider J.W., et al. Proc. Natl. Acad. Sci. U.S.A. 82:6357-6361(1985).