

ATP1A3 Blocking Peptide (Center)

Synthetic peptide

Catalog # BP20032c

Specification

ATP1A3 Blocking Peptide (Center) - Product Information

Primary Accession

[P13637](#)

Other Accession

[P06687](#), [Q6PIC6](#), [P24797](#), [NP_689509.1](#)**ATP1A3 Blocking Peptide (Center) - Additional Information****Gene ID** 478**Other Names**

Sodium/potassium-transporting ATPase subunit alpha-3, Na(+)/K(+) ATPase alpha-3 subunit, Na(+)/K(+) ATPase alpha(III) subunit, Sodium pump subunit alpha-3, ATP1A3

Target/Specificity

The synthetic peptide sequence is selected from aa 820-833 of HUMAN ATP1A3

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.

ATP1A3 Blocking Peptide (Center) - Protein Information**Name** ATP1A3**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.

Cellular Location

Cell membrane; Multi-pass membrane protein

ATP1A3 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

ATP1A3 Blocking Peptide (Center) - Images

ATP1A3 Blocking Peptide (Center) - Background

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺-ATPases. Na⁺/K⁺-ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na⁺/K⁺-ATPase is encoded by multiple genes. This gene encodes an alpha 3 subunit.

ATP1A3 Blocking Peptide (Center) - References

Einholm, A.P., et al. J. Biol. Chem. 285(34):26245-26254(2010)
Floyd, R.V., et al. Reprod Sci 17(4):366-376(2010)
Hauck, C., et al. Eur. J. Pharmacol. 622 (1-3), 7-14 (2009) :
Blanco-Arias, P., et al. Hum. Mol. Genet. 18(13):2370-2377(2009)
Goldstein, I., et al. Biol. Psychiatry 65(11):985-991(2009)