

ATP1A3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20032c

Specification

ATP1A3 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P13637</u> <u>P06687, O6PIC6, P24797, NP_689509.1</u> Human Chicken, Mouse, Rat Rabbit Polyclonal Rabbit IgG 111749 805-833

ATP1A3 Antibody (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

This ATP1A3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 805-833 amino acids from the Central region of human ATP1A3.

Dilution

WB~~1:1000

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

ATP1A3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP1A3 Antibody (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

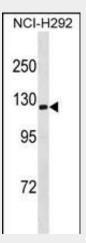
Cell membrane; Multi-pass membrane protein

ATP1A3 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ATP1A3 Antibody (Center) - Images



ATP1A3 Antibody (Center) (Cat. #AP20032c) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the ATP1A3 antibody detected the ATP1A3 protein (arrow).

ATP1A3 Antibody (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 Antibody (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)