10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATP1A3 Antibody

Rabbit mAb
Catalog # AP92302

Product Information

Application	WB
Primary Accession	P13637
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	AHC2; Atp1a3; DYT12; RDP;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	111749

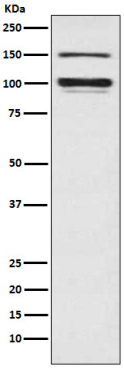
Additional Information

Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ATP1A3
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	ATP1A3
Function	Neuron-specific alpha catalytic component of the Na(+)/K(+)- transporting ATPase, which catalyzes the hydrolysis of ATP coupled with the exchange of Na(+) and K(+) ions across the plasma membrane (PubMed:36075933). Transports 3 Na(+) ions out of the cell and 2 K(+) ions into the cell for each ATP hydrolyze against their electrochemical gradients to maintain ion concentration gradients across the membranes (By similarity). In the brain, ATP1A3 is critical for neuronal cell signaling and for maintenance of electrochemical stability, enabling cell excitation and action potential propagation (PubMed:33880529, PubMed:36075933).
Cellular Location	Cell membrane; Multi-pass membrane protein

Images



Western blot analysis of ATP1A3 expression in Rat brain lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.