

Anti-ATP1A3 Rabbit Monoclonal Antibody

Catalog # ABO15722

Specification

Anti-ATP1A3 Rabbit Monoclonal Antibody - Product Information

Application WB **Primary Accession** P13637 Rabbit Host Isotype laG Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-ATP1A3 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-ATP1A3 Rabbit Monoclonal Antibody - Additional Information

Gene ID 478

Other Names Sodium/potassium-transporting ATPase subunit alpha-3, Na(+)/K(+) ATPase alpha-3 subunit, 7.2.2.13, Na(+)/K(+) ATPase alpha(III) subunit, Sodium pump subunit alpha-3, ATP1A3

Calculated MW 100-150 kDa KDa

Application Details WB 1:500-1:2000

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human ATP1A3

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-ATP1A3 Rabbit Monoclonal Antibody - 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

Anti-ATP1A3 Rabbit Monoclonal Antibody - 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>

Anti-ATP1A3 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Western blot analysis of ATP1A3 expression in Rat brain lysate.



Figure 1. Western blot analysis of ATP1A3 using anti-ATP1A3 antibody (M02278).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human SH-SY5Y whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: human HEL whole cell lysates,

Lane 4: human PC-3 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ATP1A3 antigen affinity purified monoclonal antibody (Catalog # M02278) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ATP1A3 at approximately 112 kDa. The expected band size for ATP1A3 is at 112 kDa.