

Basic Information

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|---------------------------|--|------------|
| Product Name | Anti-ATP1B2 Antibody | |
| Gene Name | ATP1B2 | |
| Source | Rabbit | |
| Clonality | Polyclonal | |
| Isotype | IgG | |
| Species Reactivity | human, mouse, rat | |
| Tested Application | WB, IHC, FCM, ELISA | |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol. | |
| Immunogen | E.coli-derived human ATP1B2 recombinant protein (Position: M1-T290). | |
| Concentration | 500 ug/ml | |
| Purification | Immunogen affinity purified. | |
| Observed MW | 44 kDa | |
| Dilution Ratios | Western blot (WB): | 1:500-2000 |
| | Immunohistochemistry (IHC): | 1:50-400 |
| | Flow Cytometry (Fixed): | 1:50-200 |
| | Enzyme linked immunosorbent assay (ELISA): | 1:100-1000 |
| | (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. | |

Storage

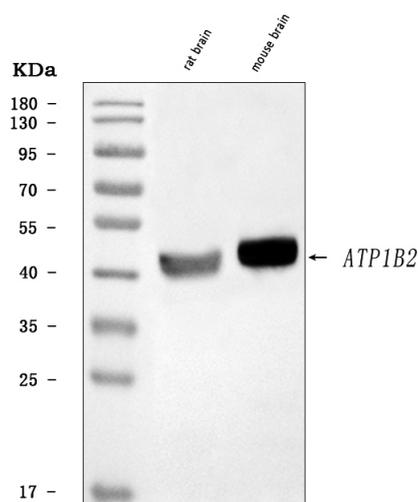
12 months from date of receipt, -20°C as supplied.

Background Information

The protein encoded by this gene belongs to the family of Na⁺/K⁺ and H⁺/K⁺ ATPases beta chain proteins, 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 beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na⁺/K⁺ -ATPase is

encoded by multiple genes. This gene encodes a beta 2 subunit. Two transcript variants encoding different isoforms have been found for this gene.

Selected Validation Data



Western blot analysis of ATP1B2 using anti-ATP1B2 antibody (A07027-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

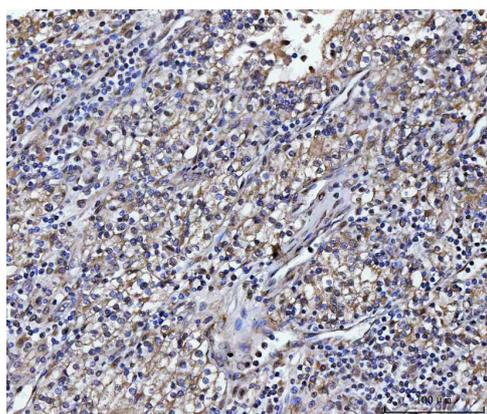
Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATP1B2 antigen affinity purified polyclonal antibody (A07027-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054).

The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ATP1B2 at approximately 44 kDa. The expected band size for ATP1B2 is at 33 kDa.



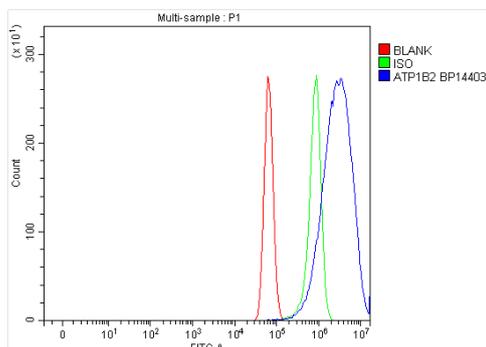
IHC analysis of ATP1B2 using anti-ATP1B2 antibody (A07027-2).

ATP1B2 was detected in a paraffin-embedded section of human glioma tissue.

Biotinylated goat anti-rabbit IgG was used as secondary antibody.

The tissue section was incubated with rabbit anti-ATP1B2 Antibody (A07027-2) at a dilution of 1:200 and

developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of U87 cells using anti-ATP1B2 antibody (A07027-2).

Overlay histogram showing U87 cells stained with A07027-2 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-ATP1B2 Antibody (A07027-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.