

ATP1B2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5299

Specification

ATP1B2 Antibody (Center) - Product Information

Application WB, IHC-P, FC,E

Primary Accession P14415

Other Accession <u>P13638</u>, <u>Q8WMG3</u>, <u>P14231</u>, <u>Q28030</u>

Reactivity Human, Mouse Predicted Bovine, Rabbit, Rat

Host Rabbit Clonality Polyclonal

Calculated MW H=33;M=33;Rat=33 KDa

Isotype Rabbit IgG
Antigen Source HUMAN

ATP1B2 Antibody (Center) - Additional Information

Gene ID 482

Antigen Region

 $115 - \bar{1}41$

Other Names

ATP1B2; Sodium/potassium-transporting ATPase subunit beta-2; Sodium/potassium-dependent ATPase subunit beta-2

Dilution

WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Target/Specificity

This ATP1B2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-141 amino acids from the Central region of human ATP1B2.

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

ATP1B2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.



ATP1B2 Antibody (Center) - Protein Information

Name ATP1B2

Function

This is the non-catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of Na(+) and K(+) ions across the plasma membrane. The exact function of the beta-2 subunit is not known.

Cellular Location

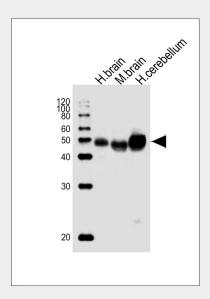
Cell membrane; Single-pass type II membrane protein

ATP1B2 Antibody (Center) - Protocols

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

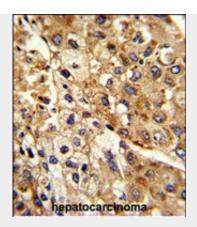
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATP1B2 Antibody (Center) - Images

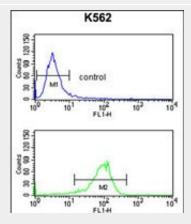


Western blot analysis of lysates from human brain, mouse brain and human cerebellum tissue lysate (from left to right), using ATP1B2 Antibody (Center)(Cat. #AW5299). AW5299 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ATP1B2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ATP1B2 Antibody (Center) (Cat. #AW5299) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ATP1B2 Antibody (Center) - Background

The protein 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.

ATP1B2 Antibody (Center) - References

Guey,L.T., et.al., Eur. Urol. 57 (2), 283-292 (2010) Tokhtaeva,E., et.al., Biochemistry 48 (48), 11421-11431 (2009) Hosgood,H.D. et.al., Respir Med 103 (12), 1866-1870 (2009)