

ATP1B2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9271c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P14415
Other Accession	P13638 , Q8WWMG3 , P14231 , Q28030
Reactivity	Human
Predicted	Bovine, Mouse, Rabbit, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22612
Calculated MW	33367
Antigen Region	115-141

Additional Information

Gene ID	482
Other Names	Sodium/potassium-transporting ATPase subunit beta-2, Adhesion molecule in glia, AMOG, Sodium/potassium-dependent ATPase subunit beta-2, ATP1B2
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.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	ATP1B2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

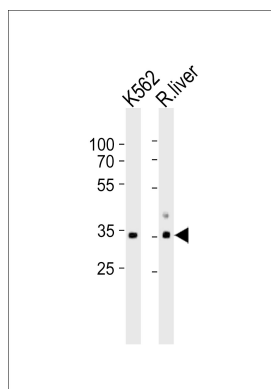
Background

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.

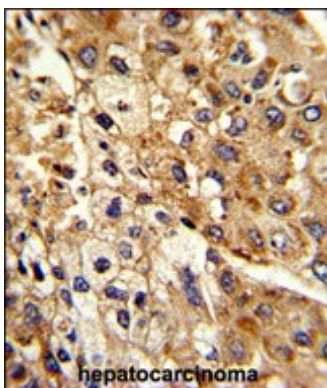
References

- 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)

Images

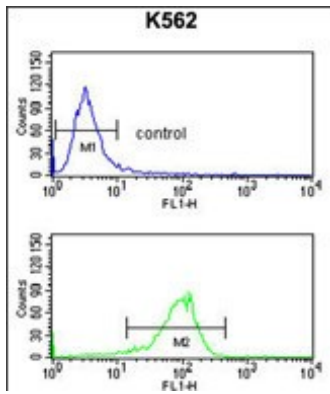


Western blot analysis of lysates from K562 cell line and rat liver tissue lysate(from left to right), using ATP1B2 Antibody (Center)(Cat. #AP9271c). AP9271c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



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. #AP9271c) 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.



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