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ATP1B2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5299

Product Information

Application	FC, IHC-P, WB
Primary Accession	P14415
Other Accession	P13638, Q8WMG3, P14231, Q28030
Reactivity	Human, Mouse
Predicted	Rat, Rabbit, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33367
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	482
Antigen Region	115-141
Other Names	ATP1B2; Sodium/potassium-transporting ATPase subunit beta-2; Sodium/potassium-dependent ATPase subunit beta-2
Dilution	FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000
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.

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

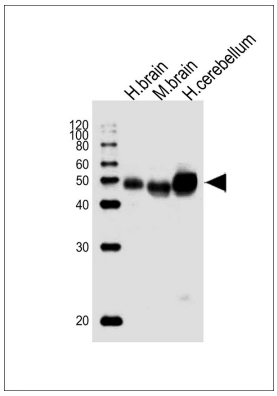
Background

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.

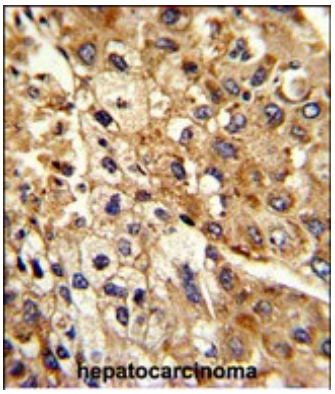
References

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

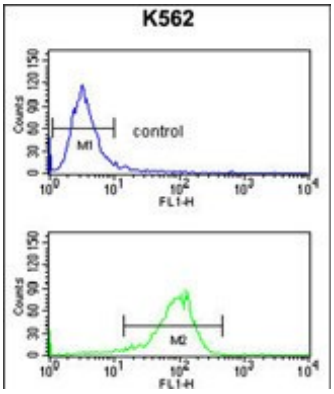


Western blot analysis of lysates from human brain,mouse brain and human cerebellum tissue lysate (from left to right), using ATP1B2 Antibody (Center)(Cat. #AW5299). AW5299 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



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.



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