

ATP1B1 Polyclonal Antibody

Catalog NumberPA5-19199

Product data sheet

Details		Species Reactivity	
Size	100 µg	Species reactivity	Human, Mouse, Rat
Host/Isotope	Goat / IgG	Tested Applications	
Class	Polyclonal	Immunohistochemistry (Paraffin) (IHC (P))	5 µg/mL
Type	Antibody	Western Blot (WB)	0.1-0.3 µg/mL
Immunogen	Synthetic peptide sequence (KTEISFRPNDPKSYE) corresponding to the internal amino acids of ATP1B1	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Conjugate	Unconjugated		
Form	Liquid		
Concentration	0.5 mg/mL		
Purification	Ammonium sulfate precipitation		
Storage buffer	TBS, pH 7.3, with 0.5% BSA		
Contains	0.02% sodium azide		
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles		

Product specific information

This antibody is predicted to react with bovine, canine, human and porcine based on sequence homology. This antibody is tested in Peptide ELISA: antibody detection limit dilution 128,000.

Background/Target 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 1 subunit. Alternatively spliced transcript variants encoding different isoforms have been described, but their biological validity is not known.

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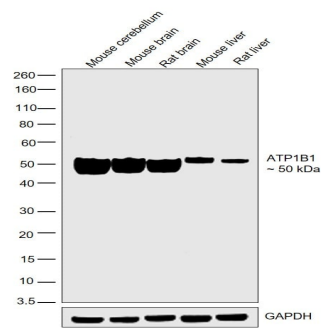
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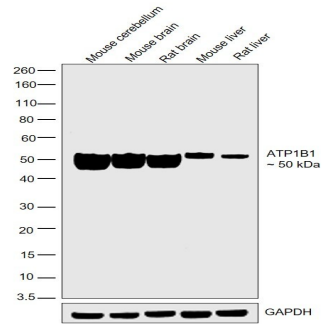
ATP1B1 Antibody (PA5-19199) in WB

Western blot was performed using Anti-ATP1B1 Polyclonal Antibody, (Product # PA5-19199) and band at ~50 kDa corresponding to ATP1B1 was observed across tissues tested. Tissue extracts (30 µg lysate) of Mouse Cerebellum (Lane 1), Mouse Brain (Lane 2), Rat Brain (Lane 3), Mouse Liver (Lane 4) and Rat Liver (Lane 5) were electrophoresed using Novex® NuPAGE® 10% Bis-Tris Protein Gel (Product # NP0301BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Rabbit anti-Goat IgG Heavy Chain Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27014, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



ATP1B1 Antibody (PA5-19199)

Antibody specificity was demonstrated by detection of differential basal expression of the target across tissues owing to their inherent genetic constitution. Relative expression of ATP1B1 was observed in brain and cerebellum tissue in comparison to liver tissue using ATP1B1 Polyclonal Antibody (Product # PA5-19199) in western blot. {RE}



ATP1B1 Antibody (PA5-19199) in WB

Western blot analysis of ATP1B1 using ATP1B1 Polyclonal Antibody (Product # PA5-19199) (0.1 µg/mL) in staining of Rat Retina lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



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