

For Research Use Only

Mouse ATP1B1 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 85916-1-PBS



Basic Information

Catalog Number: 85916-1-PBS	GenBank Accession Number: NM_009721.6	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 11931	CloneNo.: 243093E3
Source: Rabbit	UNIPROT ID: P14094	
Isotype: IgG	Full Name: ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide	
Immunogen Catalog Number: EG3007	Calculated MW: 35 kDa	
	Observed MW: 40-50 kDa	

Applications

Tested Applications:
WB, IHC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

85916-1-PBS targets ATP1B1 as part of a matched antibody pair.

MP02193-1: 85916-1-PBS capture and 85916-3-PBS detection (validated in Cytometric bead array)

MP02193-2: 85916-1-PBS capture and 85916-2-PBS detection (validated in Cytometric bead array)

MP02193-3: 85916-2-PBS capture and 85916-1-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

ATP1B1 is one of beta subunits of the Na⁺/K⁺ ATPase and responsible for formation and structural integrity of the Na⁺/K⁺ ATPase. The Na⁺/K⁺ ATPase is a plasma membrane pump consisting of alpha, beta, and gamma subunits. At least four of Na⁺/K⁺-ATPase beta subunits (β1, β2, β3, β4) have been identified in mammalian cells; the β1-subunit (ATP1B1) is the most ubiquitous. The Na⁺/K⁺ ATPase β subunits have multiple N-glycosylation sites. The predicted MW of ATP1B1 is 35 kDa, while it migrates around 40-52 kDa due to the variable glycosylation. (PMID: 10896885, 17714085)

Storage

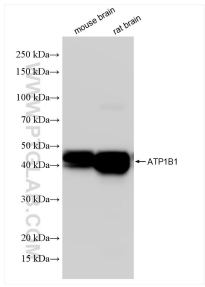
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

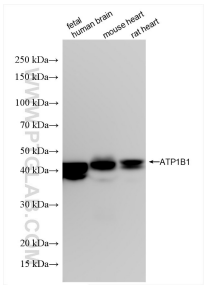
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

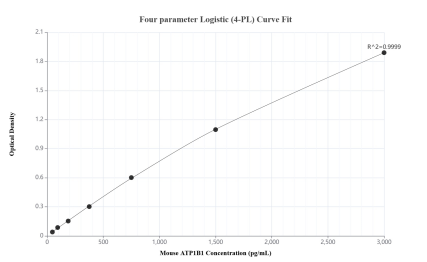
Selected Validation Data



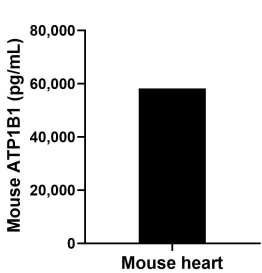
Various lysates were subjected to SDS PAGE followed by western blot with 85916-1-RR (Atp1b1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85916-1-PBS in a different storage buffer formulation.



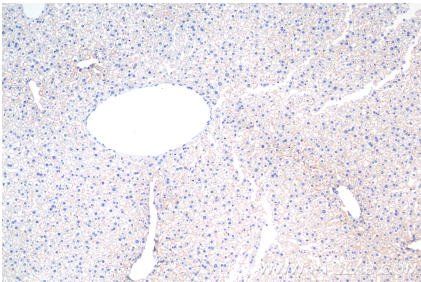
Various lysates were subjected to SDS PAGE followed by western blot with 85916-1-RR (Atp1b1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85916-1-PBS in a different storage buffer formulation.



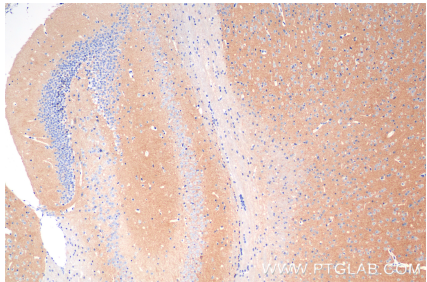
Sandwich ELISA standard curve of MP02193-3, Mouse ATP1B1 Recombinant Matched Antibody Pair - PBS only. 85916-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg3007. 85916-1-PBS was HRP conjugated as the detection antibody. Range: 46.9-3000 pg/mL.



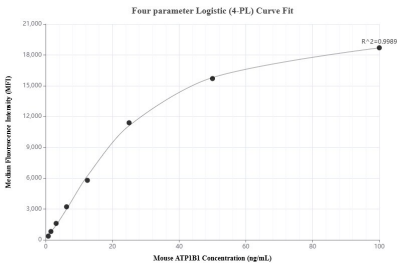
The mean ATP1B1 concentration was determined to be 58,169.6 pg/mL in mouse heart extract based on a 6.9 mg/mL extract load.



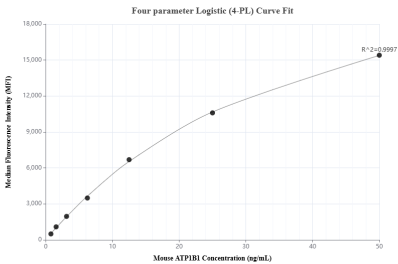
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 85916-1-RR (ATP1B1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85916-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 85916-1-RR (ATP1B1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85916-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP02193-1, MOUSE ATP1B1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85916-1-PBS. Detection antibody: 85916-3-PBS. Standard: Eg3007. Range: 0.781-100 ng/mL.



Cytometric bead array standard curve of MP02193-2, MOUSE ATP1B1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85916-1-PBS. Detection antibody: 85916-2-PBS. Standard: Eg3007. Range: 0.781-50 ng/mL.