

For Research Use Only

# ATP2B1 Recombinant antibody, PBS Only (Capture)

Catalog Number:83827-3-PBS



## Basic Information

<b>Catalog Number:</b> 83827-3-PBS	<b>GenBank Accession Number:</b> NM_001001323.1	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 490	<b>CloneNo.:</b> 240848D10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P20020	
<b>Isotype:</b> IgG	<b>Full Name:</b> ATPase, Ca <sup>++</sup> transporting, plasma membrane 1	
<b>Immunogen Catalog Number:</b> AG32423	<b>Calculated MW:</b> 135 kDa	
	<b>Observed MW:</b> 130 kDa	

## Applications

**Tested Applications:**  
WB, IHC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse

## Product Information

83827-3-PBS targets ATP2B1 as part of a matched antibody pair:

MP00808-1: 83827-3-PBS capture and 83827-2-PBS detection (validated in Cytometric bead array)

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

ATPase plasma membrane Ca<sup>2+</sup> transporting 1 (ATP2B1, also known as plasma membrane Ca<sup>2+</sup> pump isoform 1; PMCA1) belongs to the family of ATP-driven calmodulin-dependent Ca<sup>2+</sup> pumps that participate in the regulation of intracellular free Ca<sup>2+</sup> (PMID:35358416). The ATP2B1 contents of extracellular vesicles are increased in prostate cancer treated with enzalutamide and are negatively regulated by androgen receptors (PMID:29105980). ATP2B1 plays an important role in the prognosis of cholangiocarcinoma. Furthermore, ATP2B1 plays an important role in the prognosis of cholangiocarcinoma and can be a prognostic factor for cholangiocarcinoma (PMID:35875160).

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

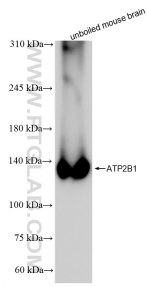
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

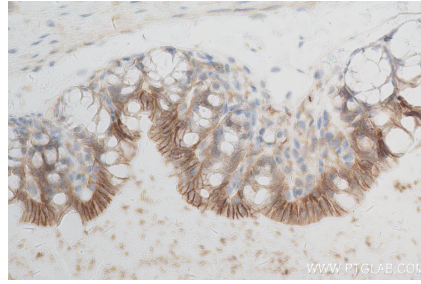
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

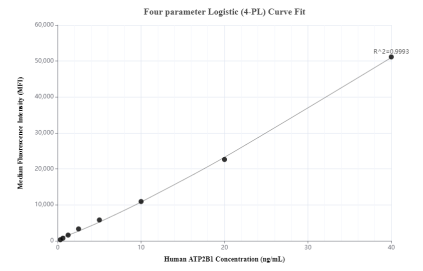
## Selected Validation Data



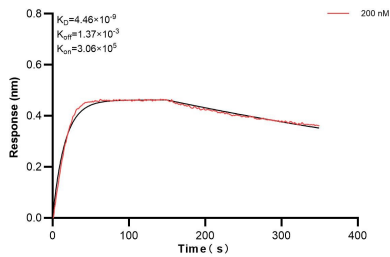
unboiled mouse brain tissue were subjected to SDS PAGE followed by western blot with 83827-3-RR (ATP2B1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83827-3-PBS in a different storage buffer formulation.



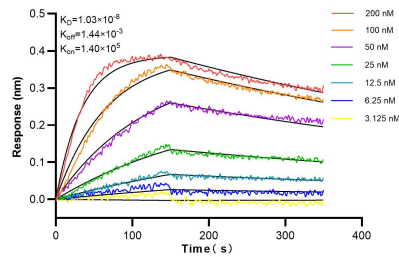
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 83827-3-RR (ATP2B1 antibody) at dilution of 1:0 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83827-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00808-1, ATP2B1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83827-3-PBS. Detection antibody: 83827-2-PBS. Standard: Ag32423. Range: 0.313-40 ng/mL.



Bi-layer interferometry (BLI) kinetic assay of 83827-3-PBS against Human ATP2B1 was performed. The affinity constant is 4.46 nM.



Bi-layer interferometry (BLI) kinetic assays of 83827-3-RR against Human ATP2B1 were performed. The affinity constant is 10.3 nM.