

For Research Use Only

# ATP1A1/2 Monoclonal antibody, PBS Only

Catalog Number: 68505-1-PBS



## Basic Information

<b>Catalog Number:</b> 68505-1-PBS	<b>GenBank Accession Number:</b> BC052271	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 477	<b>CloneNo.:</b> 3D8G1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P50993	
<b>Isotype:</b> IgG1	<b>Full Name:</b> ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 2 (+) polypeptide	
<b>Immunogen Catalog Number:</b> AG10489	<b>Calculated MW:</b> 1020 aa, 112 kDa	
	<b>Observed MW:</b> 97-100 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Indirect ELISA

**Species Specificity:**  
human, mouse, rat, pig

## Background Information

ATP1A1/2 is the catalytic component of the active enzyme Na<sup>+</sup>/K<sup>+</sup>-ATPase, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. The Na<sup>+</sup>/K<sup>+</sup>-ATPase is composed of a larger catalytic  $\alpha$ -subunit (~110 kDa) and a small  $\beta$ -subunit (~55 kDa). The  $\alpha$  subunit has four isoforms identified to date:  $\alpha$ 1,  $\alpha$ 2,  $\alpha$ 3 and  $\alpha$ 4. The  $\alpha$ 1 isoform is expressed ubiquitously but the  $\alpha$ 2 isoform is present largely in the skeletal muscle, heart and vascular smooth muscle. The  $\alpha$ 3 isoform is found almost exclusively in neurons and ovaries. The  $\alpha$ 4 isoform is expressed in sperm. This antibody can recognize ATP1A1 and ATP1A2.

## Storage

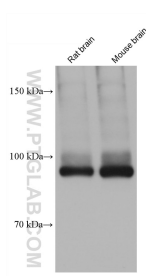
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

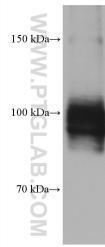
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

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

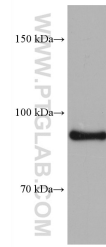
## Selected Validation Data



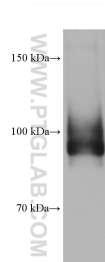
Various lysates were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68505-1-PBS in a different storage buffer formulation.



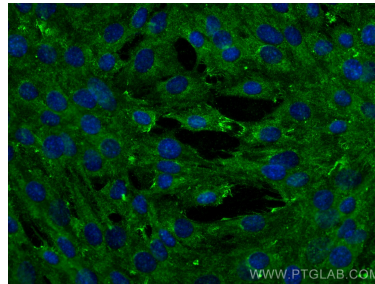
SK-BR-3 cells were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68505-1-PBS in a different storage buffer formulation.



rat kidney tissue were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68505-1-PBS in a different storage buffer formulation.



pig brain tissue were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68505-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed C2C12 cells using ATP1A1/2 antibody (68505-1-Ig, Clone: 3D8G1) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 68505-1-PBS in a different storage buffer formulation.