

For Research Use Only

# ATP1A1/2 Monoclonal antibody

Catalog Number: 68505-1-Ig



## Basic Information

<b>Catalog Number:</b> 68505-1-Ig	<b>GenBank Accession Number:</b> BC052271	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 500 µg/ml	<b>GeneID (NCBI):</b> 477	<b>CloneNo.:</b> 3D8G1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P50993	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<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, ELISA

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

**Positive Controls:**  
WB: rat brain tissue, SK-BR-3 cells, rat kidney tissue, pig brain tissue, mouse brain tissue

## 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 -20°C. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

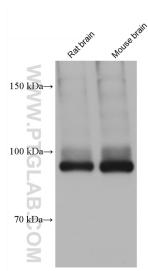
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

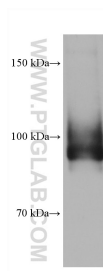
W: [ptgcn.com](http://ptgcn.com)

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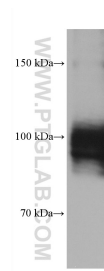
## Selected Validation Data



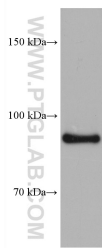
Various lysates were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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.



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.



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.