

For Research Use Only

# ATP1A1/2 Monoclonal antibody

Catalog Number: 68505-1-Ig



## Basic Information

Catalog Number:

68505-1-Ig

Concentration:

500 ug/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG10489

GenBank Accession Number:

BC052271

GeneID (NCBI):

477

UNIPROT ID:

P50993

Full Name:

ATPase, Na<sup>+</sup>/K<sup>+</sup> transporting, alpha 2  
(+) polypeptide

Calculated MW:

1020 aa, 112 kDa

Observed MW:

97-100 kDa

Purification Method:

Protein A purification

CloneNo.:

3D8G1

Recommended Dilutions:

WB 1:5000-1:50000

IF/ICC 1:500-1:2000

## Applications

Tested Applications:

WB, IF/ICC, 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

IF/ICC : C2C12 cells, HEK-293 cells

## 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

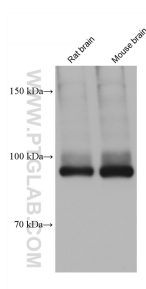
T: 4006900926

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

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

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

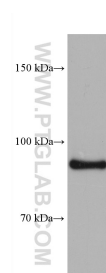
## Selected Validation Data



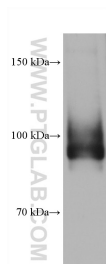
Various lysates were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



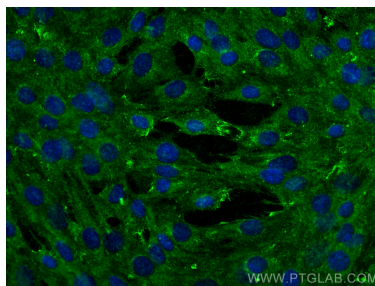
SK-BR-3 cells were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



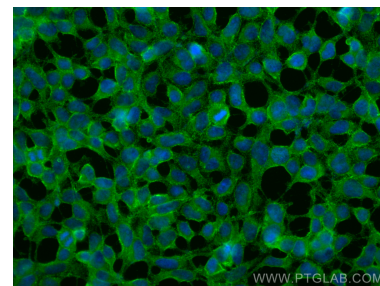
rat kidney tissue were subjected to SDS PAGE followed by western blot with 68505-1-Ig (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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.



Immunofluorescent analysis of (-20°C Ethanol) fixed C2C12 cells using ATP1A1/2 antibody (68505-1-Ig, Clone: 3D8G1 ) at dilution of 1:450 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using ATP1A1/2 antibody (68505-1-Ig, Clone: 3D8G1 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).