For Research Use Only

ATP1A1/2 Monoclonal antibody

Catalog Number: 68505-1-Ig



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number:

68505-1-lg BC052271 Protein A purification

GeneID (NCBI): CloneNo.: 150ul , Concentration: 500 ug/ml by 3D8G1

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P50993 WB 1:5000-1:50000 Mouse IF/ICC 1:500-1:2000 Full Name:

Isotype: ATPase, Na+/K+ transporting, alpha 2

lgG1 (+) polypeptide Immunogen Catalog Number: Calculated MW: AG10489 1020 aa. 112 kDa

> Observed MW: 97-100 kDa

Applications

Tested Applications:

WB, IF/ICC, ELISA WB: rat brain tissue, SK-BR-3 cells, rat kidney tissue,

Positive Controls:

Species Specificity: pig brain tissue, mouse brain tissue human, mouse, rat, pig IF/ICC: C2C12 cells, HEK-293 cells

Background Information

ATP1A1/2 is the catalytic component of the active enzyme Na+/K+-ATPase, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. The Na+/K+-ATPase is composed of a larger catalytic α -subunit (\sim 110 kDa) and a small β -subunit (\sim 55 kDa). The α subunit has four isoforms identified to date: a1, a2, a3 and a4.The a1 isoform is expressed ubiquitously but the a2 isoform is present largely in the skeletal muscle, heart and vascular smooth muscle. The a3 isoform is found almost exclusively in neurons and ovaries. The a4 isoform is expressed in sperm. This antibody can recognize ATP1A1 and ATP1A2.

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

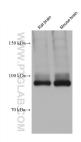
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

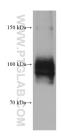
in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com

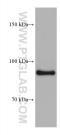
Selected Validation Data



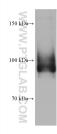
Various lysates were subjected to SDS PAGE followed by western blot with 68505-1-1g (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



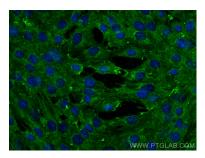
SK-BR-3 cells were subjected to SDS PAGE followed by western blot with 68505-1-1g (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



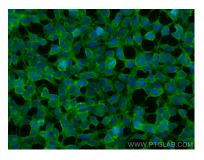
rat kidney tissue were subjected to SDS PAGE followed by western blot with 68505-1-1g (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



pig brain tissue were subjected to SDS PAGE followed by western blot with 68505-1-1g (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-lg, 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-lg, Clone: 3D8G1) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).