For Research Use Only

ATP1A1/2 Monoclonal antibody

Catalog Number: 68505-1-Ig



Basic Information

Catalog Number: GenBank Accession Number:

Purification Method: 68505-1-lg Protein G purification

GeneID (NCBI): CloneNo.: Size: 3D8G1 150ul, Concentration: 500 ug/ml by 477

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

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+-ATP as eigenvalues are also as a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane. The Na+/K+-ATP are in the plasma membrane in the plasma membrane is a simple of the plasma membrane. The Na+/K+-ATP are in the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane is a simple of the plasma membrane in the plasma membrane incomposed 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 $\mathfrak a\mathfrak Z$ 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.

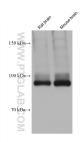
Storage Buffer

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

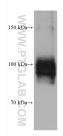
*** 20ul sizes contain 0.1%BSA

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



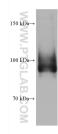
Various lysates were subjected to SDS PAGE followed by western blot with 68505-1-1g (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



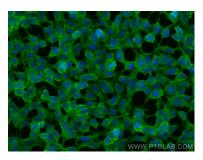
SK-BR-3 cells were subjected to SDS PAGE followed by western blot with 68505-1-lg (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



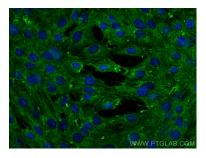
rat kidney tissue were subjected to SDS PAGE followed by western blot with 68505-1-1g (ATP1A1/2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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



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).



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).