

For Research Use Only

# ATP1A3 (C-terminal) Polyclonal antibody, PBS Only

Catalog Number: 10868-1-PBS



## Basic Information

### Catalog Number:

10868-1-PBS

### Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1313

### GenBank Accession Number:

BC015566

### GeneID (NCBI):

478

### UNIPROT ID:

P13637

### Full Name:

ATPase, Na<sup>+</sup>/K<sup>+</sup> transporting, alpha 3 polypeptide

### Calculated MW:

113 kDa

### Observed MW:

100-113 kDa

### Purification Method:

Antigen affinity purification

## Applications

### Tested Applications:

WB, IHC, IF-P, Indirect ELISA

### Species Specificity:

human, mouse, rat

## Background Information

ATP1A3 participates in the catalytic hydrolysis of ATP and the exchanging of sodium and potassium ions across plasma membrane. The catalytic activity mode is  $\text{ATP} + \text{H}_2\text{O} + \text{Na}^+(\text{In}) + \text{K}^+(\text{Out}) = \text{ADP} + \text{phosphate} + \text{Na}^+(\text{Out}) + \text{K}^+(\text{In})$ . It has been published that the neurologic disorders rapid-onset dystonia-parkinsonism (RDP), alternating hemiplegia of childhood (ACH) and CAPOS syndrome (cerebellar ataxia, areflexia, pes cavus, optic atrophy and sensorineural hearing loss) are all related with the mutation of ATP1A3. There are other reports suggest that early life epilepsy and episodic apnea revealing are potentially associated with the mutation of ATP1A3 as a result of impairment of Na/K homeostasis. This antibody is generated against the C-terminal region (665-1013aa) of ATP1A3 and detects the band around 100-113 kDa in SDS-PAGE. (PMID: 30097153, 20301294, 29922587)

## Storage

### Storage:

Store at -80°C.

### Storage Buffer:

PBS only, pH7.3

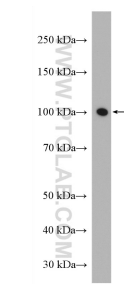
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

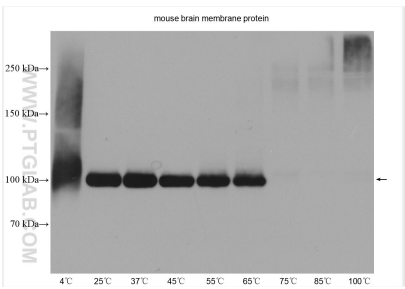
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

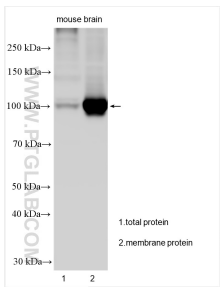
## Selected Validation Data



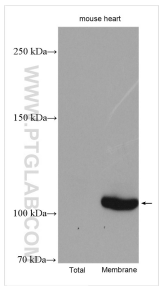
C2C12 cell were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



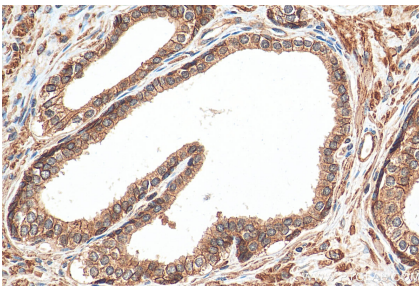
Mouse brain tissue lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



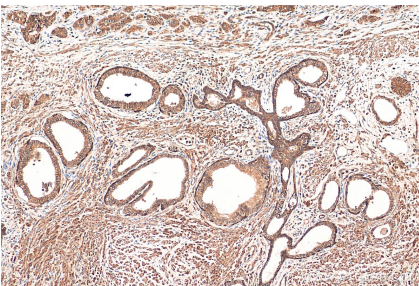
Various lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



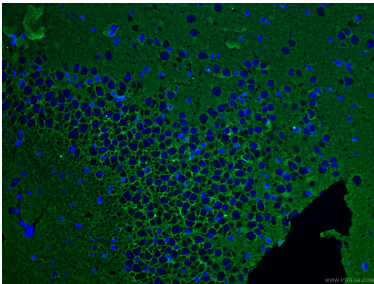
Various lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



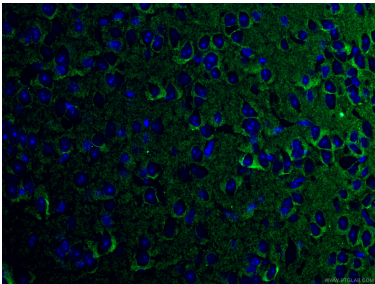
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 10868-1-AP (ATP1A3 (C-terminal) antibody), at dilution of 1:100 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 10868-1-AP (ATP1A3 (C-terminal) antibody), at dilution of 1:100 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.