

For Research Use Only

ATP1A3 (C-terminal) Polyclonal antibody, PBS Only

Catalog Number: 10868-1-PBS



Basic Information

Catalog Number:

10868-1-PBS

Concentration:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1313

GenBank Accession Number:

BC015566

GeneID (NCBI):

478

UNIPROT ID:

P13637

Full Name:

ATPase, Na⁺/K⁺ 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.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

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

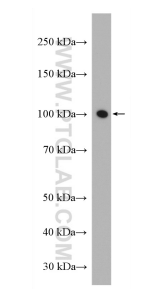
T: 4006900926

E: Proteintech-CN@ptglab.com

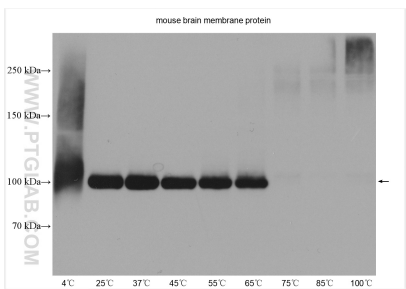
W: ptgcn.com

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

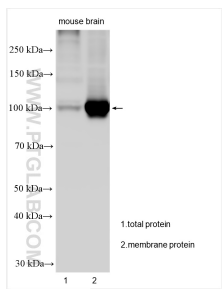
Selected Validation Data



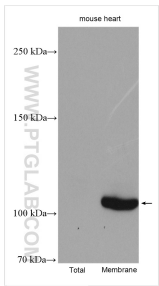
C2C12 cell were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



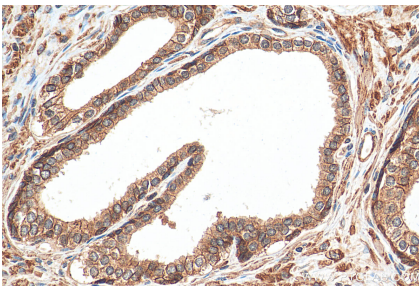
Mouse brain tissue lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



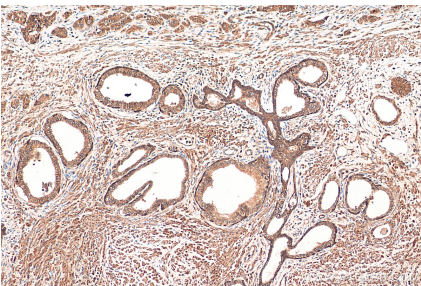
Various lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



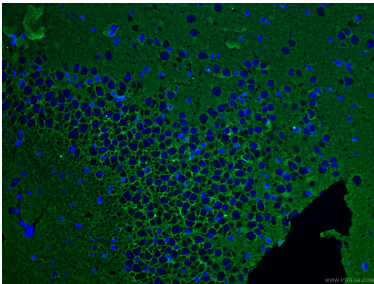
Various lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10868-1-PBS in a different storage buffer formulation.



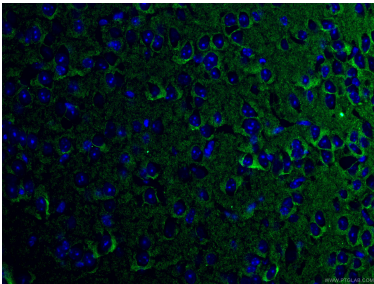
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 10868-1-PBS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