For Research Use Only

ATP1A3 (C-terminal) Polyclonal antibody

Catalog Number:10868-1-AP

4 Publications

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Basic Information

Catalog Number:
10868-1-AP

Size:
150ul , Concentration: 330 ug/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+/K+ transporting, alpha 3 polypeptide

Calculated MW:
113 kDa

Observed MW:
100-113 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:500-1:3000
IHC: 1:50-1:500
IF-P: 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF-P, ELISA

Cited Applications:
WB, IHC

Species Specificity:
human, mouse, rat

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : C2C12 cell, C2C12 cells, mouse brain tissue

IHC : human prostate cancer tissue, mouse brain tissue, mouse skeletal muscle tissue, human cerebellum tissue

IF-P : mouse brain tissue,

Background Information

ATP1A3 participates in the catalyticing hydrolysis of ATP and the exchanging of sodium and potassium ions across plasma membrane. The catalyticing activity mode is ATP + H2O + Na+(In) + K+(Out) = ADP + phosphate + Na+(Out) + K+(In). It has been published that the neurologic disorders rapid-onset dystonia-parkionsonism (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)

Notable Publications

Author	Pubmed ID	Journal	Application
Di Wu	34868940	Front Oncol	WB
Wei Huang	32684846	Cancer Cell Int	IHC
Weijin Liu	39994794	Acta Neuropathol Commun	

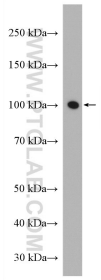
Storage

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

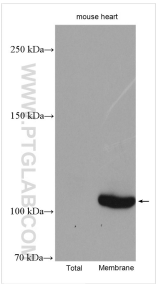
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

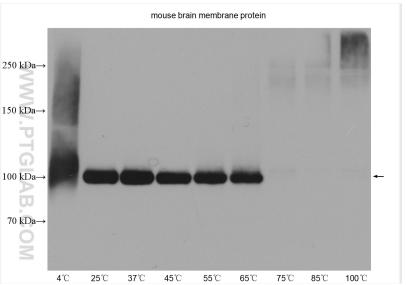
Selected Validation Data



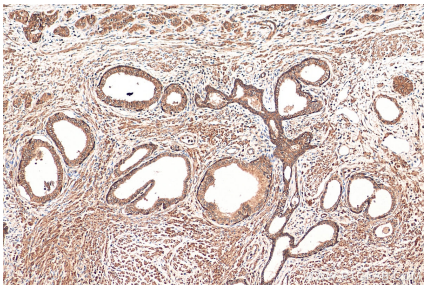
C2C12 cell were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



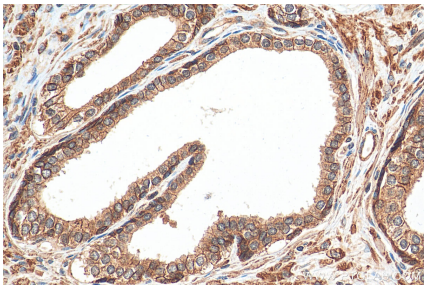
Various lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



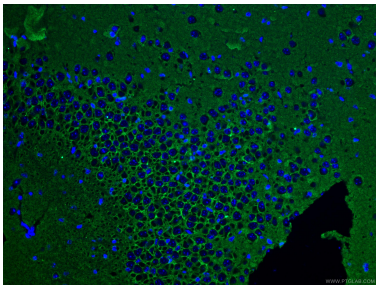
Mouse brain tissue lysates were subjected to SDS PAGE followed by western blot with 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



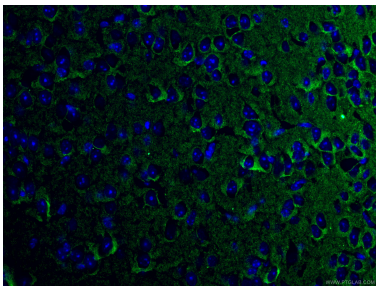
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



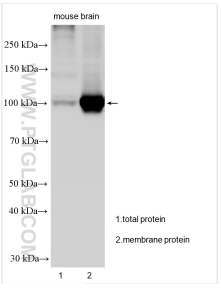
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10868-1-AP (ATP1A3 (C-terminal) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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.