For Research Use Only

# ATP1B1 Polyclonal antibody

Catalog Number:15192-1-AP 10 Publications

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## Basic Information

Catalog Number:
15192-1-AP

Size:
450 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG7279

GenBank Accession Number:
BC000006

GeneID (NCBI):
481

UNIPROT ID:
P05026

Full Name:
ATPase, Na+/K+ transporting, beta 1 polypeptide

Calculated MW:
35 kDa

Observed MW:
49-52 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:8000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200
IF 1:10-1:100

## Applications

Tested Applications:
FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
WB,IHC,IF

Species Specificity:
human, mouse

Cited Species:
human, rat, mouse

***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 : mouse brain tissue, human heart tissue, human brain tissue, mouse heart tissue

IP : mouse brain tissue,

IHC : human brain tissue, human skeletal muscle tissue

IF : HEK-293 cells,

## Background Information

ATP1B1 is one of beta subunits of the Na+/K+ ATPase and responsible for formation and structural integrity of the Na+/K+ ATPase. The Na+/K+ ATPase is a plasma membrane pump consisting of alpha, beta, and gamma subunits. At least four of Na+/K+-ATPase beta subunits (β 1, β 2, β 3, β 4) have been identified in mammalian cells; the β 1-subunit (ATP1B1) is the most ubiquitous. The Na+/K+ ATPase β subunits have multiple N-glycosylation sites. The predicted MW of ATP1B1 is 35 kDa, while it migrates around 40-52 kDa due to the variable glycosylation. (PMID: 10896885, 17714085)

## Notable Publications

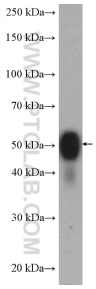
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Akihito Morinaga | 31717392 | Int J Mol Sci | WB |
| Wei Cao | 34011520 | J Immunol | IF, WB |
| Karolina Plössl | 31048931 | PLoS One | |

## Storage

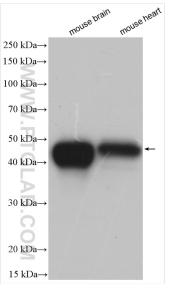
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

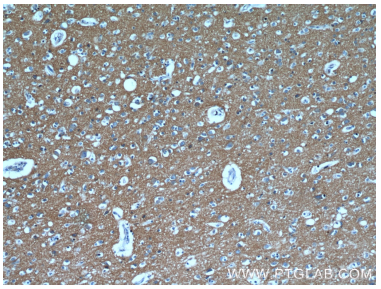
## Selected Validation Data



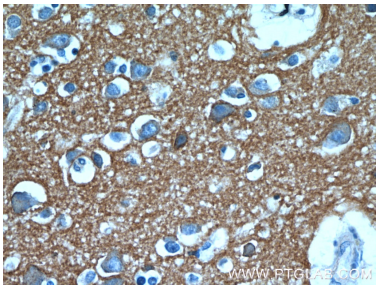

mouse brain tissue were subjected to SDS PAGE followed by western blot with 15192-1-AP (ATP1B1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



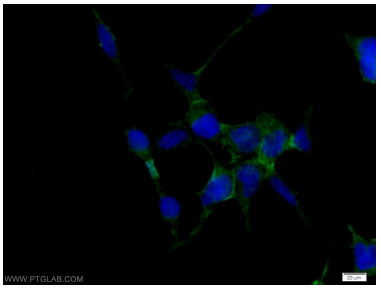

Various lysates were subjected to SDS PAGE followed by western blot with 15192-1-AP (ATP1B1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



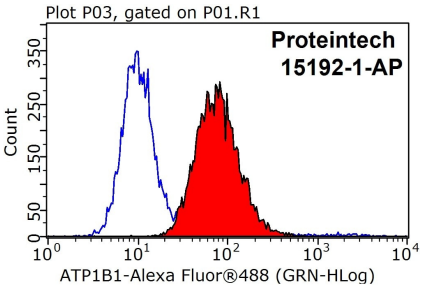

Immunohistochemical analysis of paraffin-embedded human brain using 15192-1-AP (ATP1B1 antibody) at dilution of 1:50 (under 10x lens).



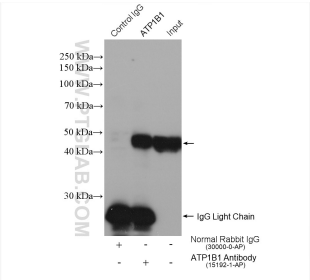

Immunohistochemical analysis of paraffin-embedded human brain using 15192-1-AP (ATP1B1 antibody) at dilution of 1:50 (under 40x lens).




Immunofluorescent analysis of HEK-293 cells using 15192-1-AP (ATP1B1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




1X10^6 HEK-293 cells were stained with 0.2ug ATP1B1 antibody (15192-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.




IP result of anti-ATP1B1 (IP:15192-1-AP, 4ug; Detection:15192-1-AP 1:2000) with mouse brain tissue lysate 1600 ug.