

For Research Use Only

ATP1A1-Specific Polyclonal antibody

Catalog Number: 55187-1-AP

Featured Product

21 Publications



Basic Information

Catalog Number:

55187-1-AP

Concentration:

600 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_000701

GeneID (NCBI):

476

ENSEMBL Gene ID:

ENSG00000163399

UNIPROT ID:

P05023

Full Name:

ATPase, Na⁺/K⁺ transporting, alpha 1 polypeptide

Calculated MW:

113 kDa

Observed MW:

100-110 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:500-1:2000

IF/ICC: 1:500-1:2000

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

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 : 37°C incubated mouse brain tissue, HEK-293 cells, HepG2 cells, MCF-7 cells, 37°C incubated mouse heart tissue, Neuro-2a cells

IHC : human ovary cancer tissue, human colon tissue, human kidney tissue, human liver cancer tissue, mouse kidney tissue

IF/ICC : HEK-293 cells, Caco-2 cells

FC (Intra) : HEK-293 cells,

Background Information

ATP1A1 is the catalytic component of Na⁺/K⁺-ATPase which is a membrane bound enzyme primarily involved in generation of Na⁺ and K⁺ gradients across plasma membranes and in determination of cytoplasmic Na⁺ levels. ATP1A1 is a ubiquitously expressed membrane protein and often used as the marker or internal control for plasma membrane protein. This antibody is specific to ATP1A1.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|------------|-----------|-----------------|-------------|
| Jun Lin | 34514733 | Adv Sci (Weinh) | WB |
| Yan Xu | 27857155 | Sci Rep | IF |
| Yuetao Wen | 35609730 | Neurosci Res | WB |

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

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

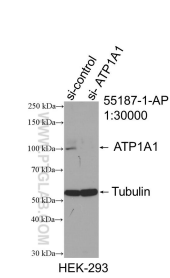
T: 4006900926

E: Proteintech-CN@ptglab.com

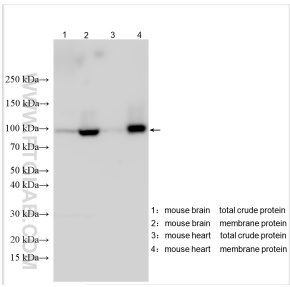
W: ptgcn.com

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

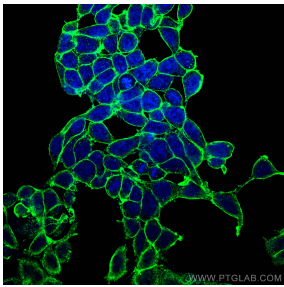
Selected Validation Data



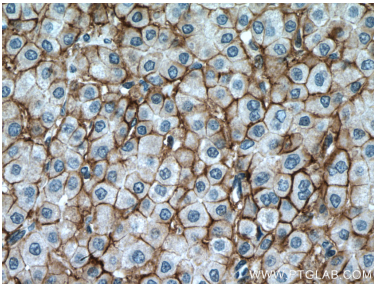
WB result of ATP1A1-Specific antibody (55187-1-AP; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATP1A1-Specific transfected HEK-293 cells.



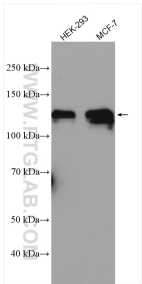
37°C incubated mouse brain membrane extract lysate and 37°C incubated mouse heart membrane extract lysate were subjected to SDS PAGE followed by western blot with 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



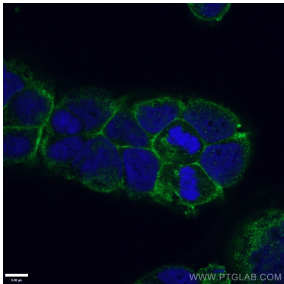
Immunofluorescent analysis of (-20°C Methanol) fixed HEK-293 cells using ATP1A1-Specific antibody (55187-1-AP) at dilution of 1:1000 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



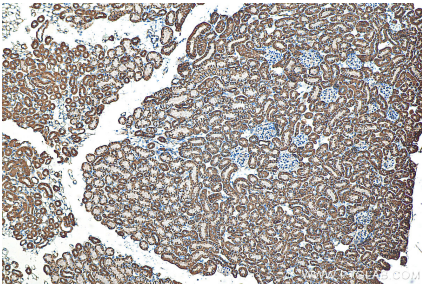
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



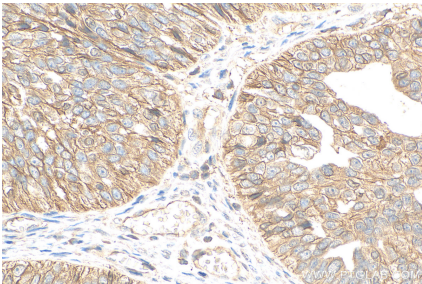
Various lysates were subjected to SDS PAGE followed by western blot with 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



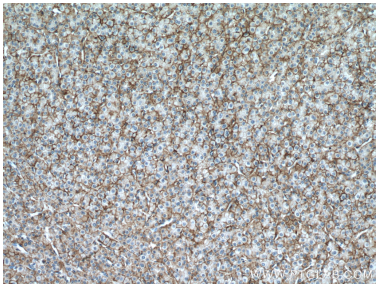
Immunofluorescent analysis of (4% PFA) fixed Caco-2 cells using 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:100 and Coralite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



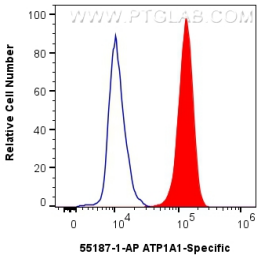
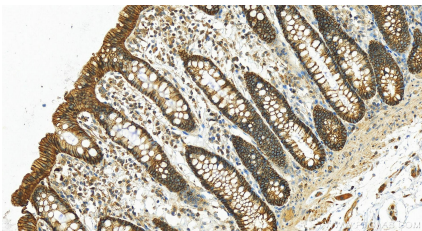
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 55187-1-AP (ATP1A1-Specific 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 normal colon slide using 55187-1-AP (ATP1A1-Specific antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

1x10⁶ HEK-293 cells were intracellularly stained with 0.4 ug ATP1A1-Specific Polyclonal antibody (55187-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).