

For Research Use Only

# ATP1A2-Specific Polyclonal antibody

Catalog Number:55179-1-AP

Featured Product

2 Publications



## Basic Information

**Catalog Number:**

55179-1-AP

**Concentration:**

350 ug/ml

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

NM\_000702

**GeneID (NCBI):**

477

**UNIPROT ID:**

P50993

**Full Name:**

ATPase, Na<sup>+</sup>/K<sup>+</sup> transporting, alpha 2 (+) polypeptide

**Calculated MW:**

112 kDa

**Observed MW:**

100 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

**Tested Applications:**

WB, IHC, IP, ELISA

**Cited Applications:**

WB, IF

**Species Specificity:**

human, mouse

**Cited Species:**

mouse, rat

**Positive Controls:**

**WB** : mouse brain tissue, human brain tissue

**IP** : mouse brain tissue,

**IHC** : mouse skeletal muscle tissue, human skeletal muscle tissue, mouse heart tissue

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

## Background Information

ATP1A2, also named as KIAA0778, belongs to the cation transport ATPase (P-type) family and Type IIC subfamily. It is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. Defects in ATP1A2 are the cause of familial hemiplegic migraine type 2 (FHM2). Defects in ATP1A2 are a cause of alternating hemiplegia of childhood (AHC). This antibody is specific to ATP1A2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jens Hammann	29880193	Cell Calcium	WB,IF
Valentina Tedeschi	34995919	Cell Calcium	WB

## 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

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

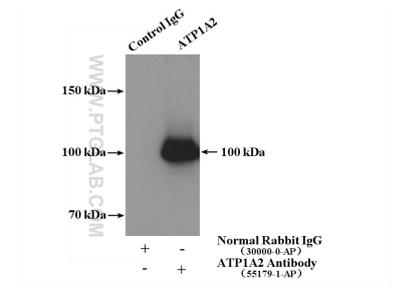
## Selected Validation Data



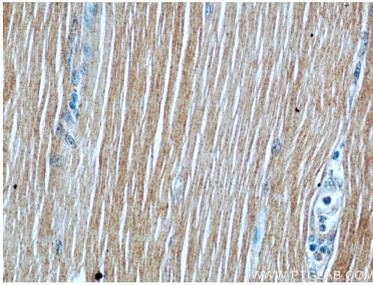
mouse brain tissue were subjected to SDS PAGE followed by western blot with 55179-1-AP (ATP1A2-Specific antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



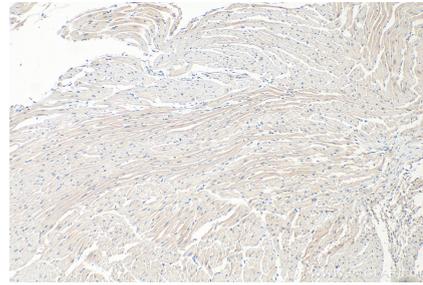
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 55179-1-AP (ATP1A2-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



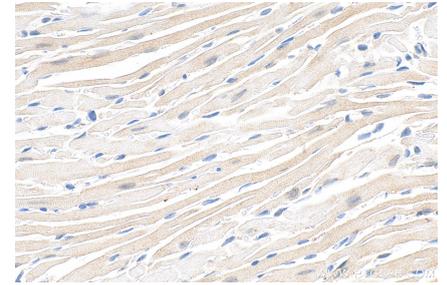
IP result of anti-ATP1A2-Specific (IP:55179-1-AP, 4ug; Detection:55179-1-AP 1:800) with mouse brain tissue lysate 4000ug.



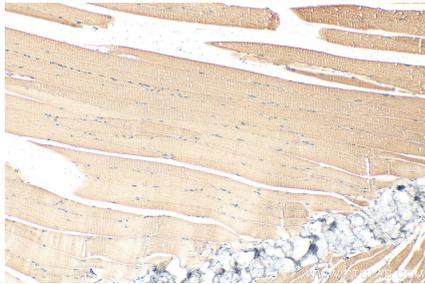
Immunohistochemical analysis of paraffin-embedded human skeletal muscle using 55179-1-AP (ATP1A2-Specific antibody) at dilution of 1:50 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 55179-1-AP (ATP1A2-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 mouse heart tissue slide using 55179-1-AP (ATP1A2-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 55179-1-AP (ATP1A2-Specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).