

For Research Use Only

# ATP2A1 Polyclonal antibody

Catalog Number: 22361-1-AP

11 Publications



## Basic Information

### Catalog Number:

22361-1-AP

### Size:

150ul, Concentration: 800 ug/ml by Nanodrop and 380 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG17944

### GenBank Accession Number:

BC037354

### GeneID (NCBI):

487

### UNIPROT ID:

O14983

### Full Name:

ATPase, Ca<sup>++</sup> transporting, cardiac muscle, fast twitch 1

### Calculated MW:

1001 aa, 110 kDa

### Observed MW:

116 kDa

### Purification Method:

Antigen Affinity purified

### Recommended Dilutions:

WB 1:20000-1:100000

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, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, pig, chicken

**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 skeletal muscle tissue, rat skeletal muscle tissue

**IP**: mouse skeletal muscle tissue,

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

## Background Information

ATP2A1 also known as SERCA1, encodes one of the SERCA Ca<sup>2+</sup>-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen and is involved in muscular excitation and contraction. Mutations in ATP2A1 cause some autosomal recessive forms of Brody disease (PMID: 23911890, 10914677).

## Notable Publications

Author	Pubmed ID	Journal	Application
Sijie Wang	36216077	Physiol Behav	WB
Jie Yang	30334551	Metallomics	WB
Nagakatsu Harada	32451822	J Muscle Res Cell Motil	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

\*\*\* 20ul sizes contain 0.1% BSA

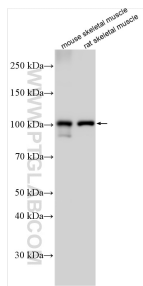
For technical support and original validation data for this product please contact:

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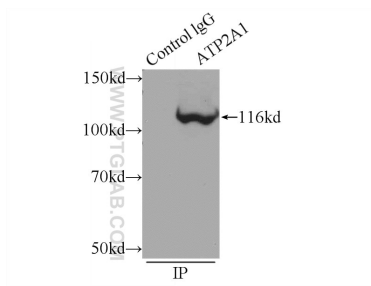
E: proteintech@ptglab.com  
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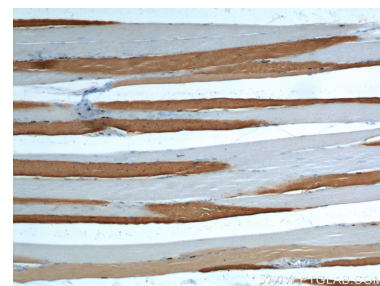
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 22361-1-AP (ATP2A1 antibody) at dilution of 1:120000 incubated at room temperature for 1.5 hours.



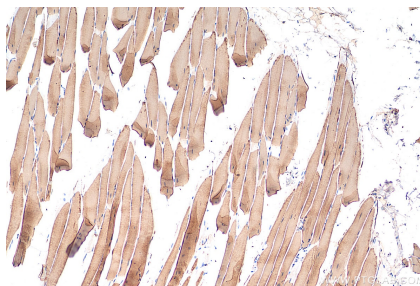
IP result of anti-ATP2A1 (IP:22361-1-AP, 5ug; Detection:22361-1-AP 1:700) with mouse skeletal muscle tissue lysate 2160ug.



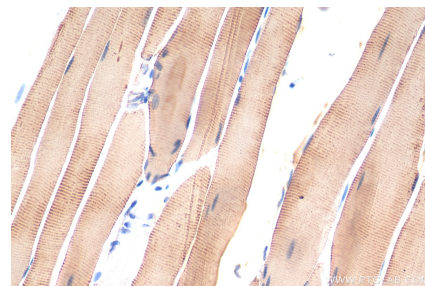
Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 22361-1-AP (ATP2A1 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 22361-1-AP (ATP2A1 Antibody) at dilution of 1:200 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 22361-1-AP (ATP2A1 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 skeletal muscle tissue slide using 22361-1-AP (ATP2A1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).