#### For Research Use Only

# SERCA2/ATP2A2 Monoclonal antibody

Catalog Number:67248-1-lg 13 Publications



**Basic Information** 

**Applications** 

Catalog Number: 67248-1-lg Concentration: 1000 ug/ml

Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG5052

**Tested Applications:** 

WB, IHC, ELISA **Cited Applications:** WB, IHC, IF

Species Specificity: human, mouse, rat **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

GenBank Accession Number:

ATPase, Ca++ transporting, cardiac

BC035588

488

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

muscle, slow twitch 2

Calculated MW: 1042 aa. 115 kDa Observed MW: 120 kDa

P16615

WB: HEK-293 cells, HepG2 cells, MCF-7 cells, HSC-T6

**Purification Method:** 

Protein G purification

Recommended Dilutions:

WB 1:3000-1:20000 IHC 1:250-1:1000

CloneNo.:

1F11A11

cells, NIH/3T3 cells

Positive Controls:

IHC: human urothelial carcinoma tissue, mouse

skeletal muscle tissue

# **Background Information**

ATP2A2, also known as SERCA2 (Sarco/endoplasmic reticulum-type calcium transport ATPase 2), is a 110 kDa magnesium-dependent enzyme catalyzing the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Human SERCA2 gene gives rise to several alternatively spliced isoforms: SERCA2a, SERCA2b and SERCA2c. ATP2A2 is mainly expressed in the sarcoplasmic reticulum of muscle cells and the endoplasmic reticulum of most cell types.

#### **Notable Publications**

| Author           | Pubmed ID | Journal         | Application |
|------------------|-----------|-----------------|-------------|
| Yu Chen          | 34592660  | Cell Calcium    | WB          |
| Huan Wei         | 25200835  | J Cell Physiol  | WB          |
| Jin - Young Yoon | 35872650  | Clin Transl Med | WB          |

## Storage

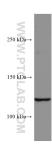
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

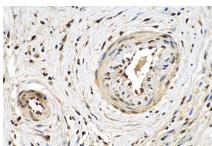
### **Selected Validation Data**



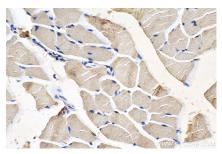
HEK-293 cells were subjected to SDS PAGE followed by western blot with 67248-1-1g (SERCA2,ATP2A2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human urothelial carcinoma tissue slide using 67248-1-Ig (SERCA2,ATP2A2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human urothelial carcinoma tissue slide using 67248-1-Ig (SERCA2,ATP2A2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 67248-1-Ig (SERCA2,ATP2A2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 67248-1-Ig (SERCA2,ATP2A2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).