

For Research Use Only

SERCA2/ATP2A2 Polyclonal antibody

Catalog Number: 27311-1-AP

Featured Product

5 Publications



Basic Information

Catalog Number:

27311-1-AP

Size:

150ul, Concentration: 750 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG26177

GenBank Accession Number:

BC035588

GeneID (NCBI):

488

UNIPROT ID:

P16615

Full Name:

ATPase, Ca⁺⁺ transporting, cardiac muscle, slow twitch 2

Calculated MW:

1042 aa, 115 kDa

Observed MW:

110-115 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:50-1:500

IF-P 1:50-1:500

IF-Fro 1:50-1:500

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse

Cited Species:

human, 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 heart tissue, HEK-293 cells, mouse heart unboiled, 37°C incubated HEK-293 cells

IHC: mouse skeletal muscle tissue, mouse liver tissue

IF-P: mouse heart tissue,

IF-Fro: mouse heart tissue,

IF/ICC: C2C12 cells, mouse heart 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
Yingchao Shi	35167494	JCI Insight	WB
Fu Liu	39477020	Biochem Pharmacol	WB
Xiang Gao	39120551	FASEB J	WB,IHC

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

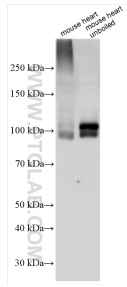
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

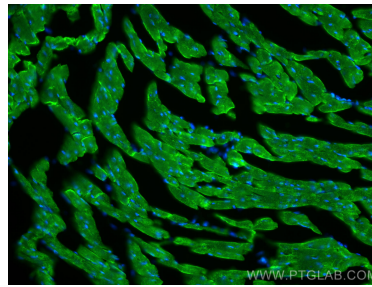
E: proteintech@ptglab.com
W: ptglab.com

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

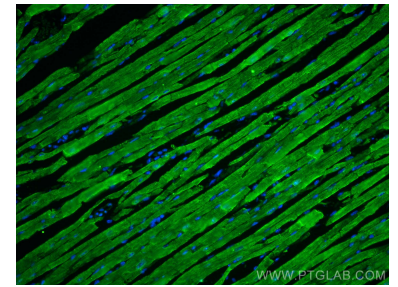
Selected Validation Data



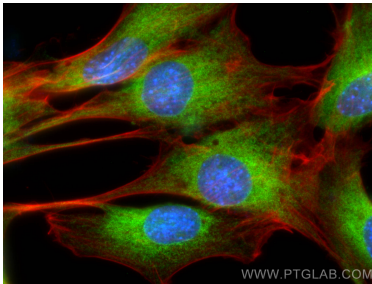
Boiled and unboiled mouse heart lysates were subjected to SDS PAGE followed by western blot with 27311-1-AP (SERCA2,ATP2A2 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



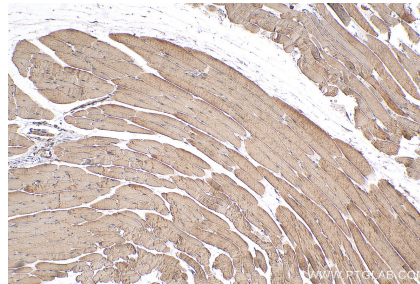
Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse heart tissue using SERCA2, ATP2A2 antibody (27311-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using SERCA2, ATP2A2 antibody (27311-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using SERCA2, ATP2A2 antibody (27311-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 27311-1-AP (SERCA2, ATP2A2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).