

For Research Use Only

# Sarcalumenin Polyclonal antibody, PBS Only

Catalog Number:33909-1-PBS



## Basic Information

Catalog Number:

33909-1-PBS

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG40750

GenBank Accession Number:

BC160181

GeneID (NCBI):

6345

UNIPROT ID:

Q86TD4

Full Name:

sarcalumenin

Observed MW:

53 kDa

Purification Method:

Antigen affinity Purification

## Applications

Tested Applications:

WB, IHC, Indirect ELISA

Species Specificity:

human, mouse, rat

## Background Information

Sarcalumenin, also known as SAR, is a luminal Ca<sup>2+</sup> buffer protein with high capacity but low affinity for calcium binding found predominantly in the longitudinal sarcoplasmic reticulum (SR) of fast and slow-twitch skeletal muscles and the heart. Together with other luminal Ca<sup>2+</sup> buffer proteins, SAR plays a critical role in modulation of Ca<sup>2+</sup> uptake and Ca<sup>2+</sup> release during excitation-contraction coupling in muscle fibers. SAR appears to be important in a wide range of other physiological functions, such as stabilizing Sarco-Endoplasmic Reticulum Calcium ATPase (SERCA), regulating Store-Operated Calcium Entry (SOCE) mechanisms, enhancing muscle fatigue resistance, and promoting muscle development. The SAR has a molecular weight of 160 kDa (Long isoform). Due to alternative splicing, the SAR gene also encodes a 53 kDa glycoprotein variant (short isoform), which shares the identical COOH-terminal half with SAR and lacks Ca<sup>2+</sup>-binding capacity (PMID: 19502553, PMID: 36899851).

## Storage

Storage:

Store at -80°C.

**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

Storage Buffer:

PBS only, pH7.3

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

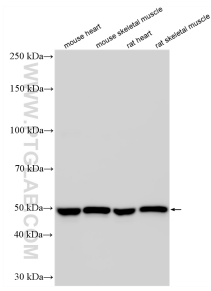
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

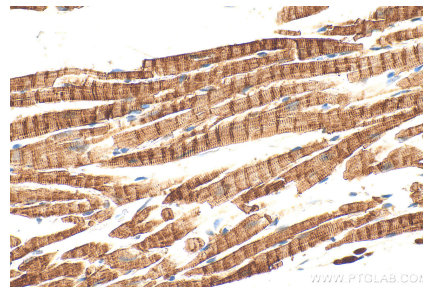
W: [ptgcn.com](http://ptgcn.com)

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

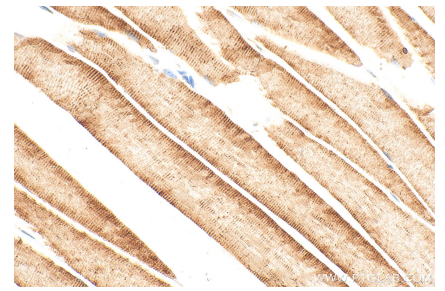
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 33909-1-AP (Sarcalumenin antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 33909-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 33909-1-AP (Sarcalumenin antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 33909-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 33909-1-AP (Sarcalumenin antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 33909-1-PBS in a different storage buffer formulation.