

For Research Use Only

Sarcalumenin Polyclonal antibody, PBS Only

Catalog Number:33909-1-PBS



Basic Information

Catalog Number: 33909-1-PBS	GenBank Accession Number: BC160181	Purification Method: Antigen affinity Purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 6345	
Source: Rabbit	UNIPROT ID: Q86TD4	
Isotype: IgG	Full Name: sarcalumenin	
Immunogen Catalog Number: AG40750	Observed MW: 53 kDa	

Applications

Tested Applications:
WB, Indirect ELISA

Species Specificity:
human, mouse, rat

Background Information

Sarcalumenin, also known as SAR, is a luminal Ca²⁺ 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 Ca²⁺ buffer proteins, SAR plays a critical role in modulation of Ca²⁺ uptake and Ca²⁺ 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 Ca²⁺-binding capacity (PMID: 19502553, PMID: 36899851).

Storage

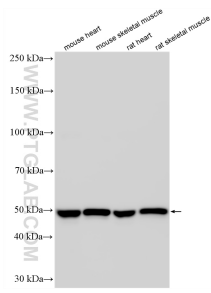
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

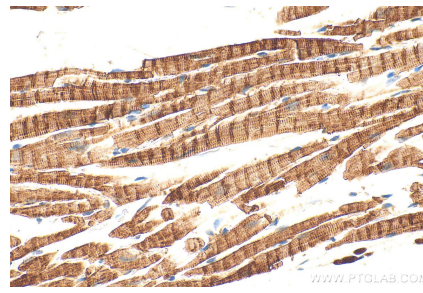
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
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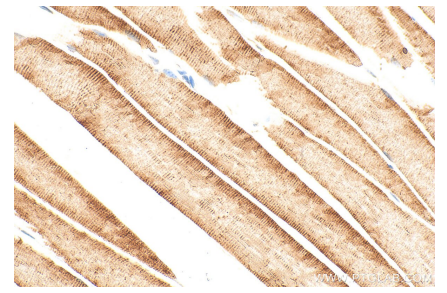
Selected Validation Data



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.