

For Research Use Only

Calsequestrin 2 Polyclonal antibody

Catalog Number: 18422-1-AP

Featured Product

16 Publications



Basic Information

Catalog Number:

18422-1-AP

Concentration:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG13246

GenBank Accession Number:

BC022288

GeneID (NCBI):

845

UNIPROT ID:

O14958

Full Name:

calsequestrin 2 (cardiac muscle)

Calculated MW:

46 kDa

Observed MW:

50 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:16000

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat, pig

Cited Species:

human, mouse, pig

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, human heart tissue, human skeletal muscle tissue, pig heart tissue, rat heart tissue

IHC : human heart tissue, human kidney tissue, human ovary tissue, human placenta tissue, human skin tissue, human spleen tissue

IF/ICC : C2C12 cell,

Background Information

Calsequestrin (CASQ) is a Ca²⁺-binding protein present primarily in junctional sarcoplasmic reticulum of skeletal and cardiac muscle; the cardiac form (CASQ2) is encoded by a separate gene. The primary role of CASQ2 is buffering of the sarcoplasmic reticulum Ca²⁺ ions, but another role for CASQ2 has emerged recently: CASQ2 regulates the open probability of ryanodine receptor 2 (RyR2). Mutations in CASQ2 cause stress-induced polymorphic ventricular tachycardia, also referred to as catecholaminergic polymorphic ventricular tachycardia 2 (CPVT2), a disease characterized by bidirectional ventricular tachycardia that may lead to cardiac arrest.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|---------------------------|-----------|--------------|-------------|
| Yingchao Shi | 35167494 | JCI Insight | WB |
| Efrat Kurtzwalld-Josefson | 28336343 | Heart Rhythm | WB,IF |
| Daniel J Blackwell | 34990403 | JCI Insight | WB,IF |

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

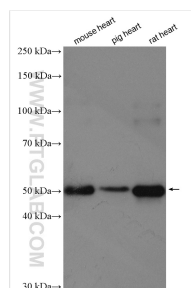
T: 4006900926

E: Proteintech-CN@ptglab.com

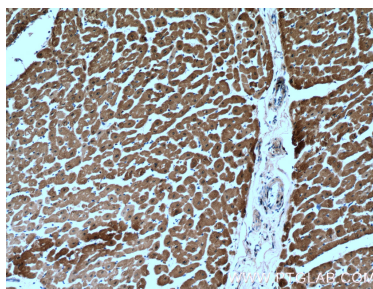
W: ptgcn.com

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

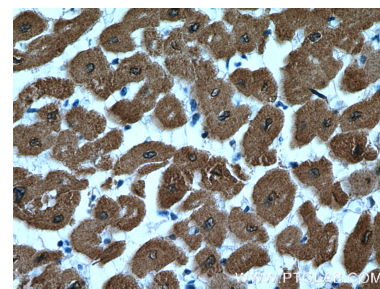
Selected Validation Data



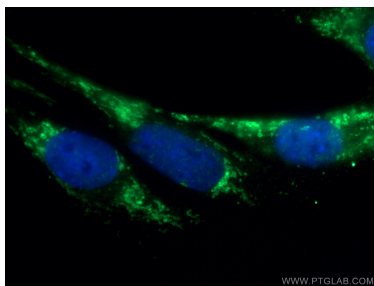
Various lysates were subjected to SDS PAGE followed by western blot with 18422-1-AP (Calsequestrin 2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 18422-1-AP (Calsequestrin 2 antibody at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 18422-1-AP (Calsequestrin 2 antibody at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed C2C12 cell using 18422-1-AP (Calsequestrin 2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).