

For Research Use Only

# Calsequestrin 2 Polyclonal antibody

Catalog Number: 18422-1-AP

Featured Product

15 Publications



## Basic Information

### Catalog Number:

18422-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop and 367 ug/ml by Bradford method using BSA as the standard;

### 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 Ca<sup>2+</sup>-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 Ca<sup>2+</sup> 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 Kurtzwalid-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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1%BSA**

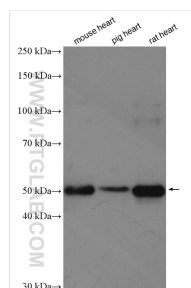
For technical support and original validation data for this product please contact:

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

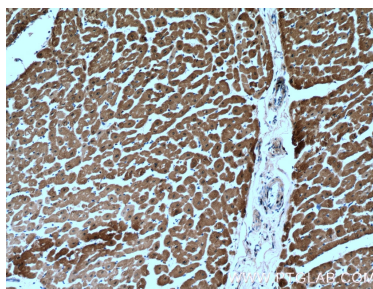
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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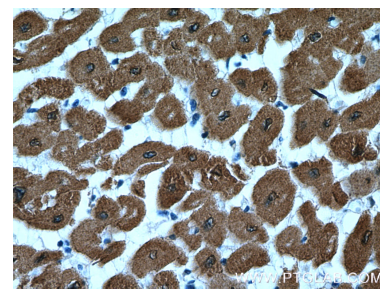
## Selected Validation Data



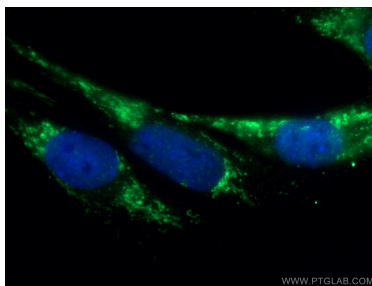
Various lysates were subjected to SDS PAGE followed by western blot with 18422-1-AP (Calsequestrin 2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



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).