

For Research Use Only

Calsequestrin 2 Monoclonal antibody



Catalog Number: 66419-1-Ig **1 Publications**

Basic Information

Catalog Number: 66419-1-Ig	GenBank Accession Number: BC022288	Purification Method: Protein A purification
Size: 1500 µg/ml	GeneID (NCBI): 845	CloneNo.: 1C10A1
Source: Mouse	UNIPROT ID: O14958	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500 IF 1:200-1:800
Isotype: IgG2a	Full Name: calsequestrin 2 (cardiac muscle)	
Immunogen Catalog Number: AG13246	Calculated MW: 46 kDa	
	Observed MW: 50 kDa	

Applications

Tested Applications:

IF-P, IHC, WB, ELISA

Cited Applications:

IHC

Species Specificity:

human, rat, pig, mouse

Cited Species:

human

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

IHC : human heart tissue,

IF : mouse heart tissue,

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
Takamura Nagasaka	33184660	J Neuropathol Exp Neurol	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

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

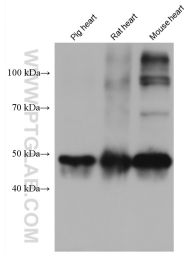
T: 4006900926

E: Proteintech-CN@ptglab.com

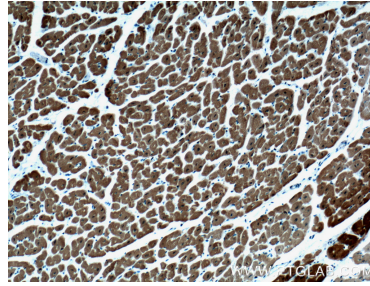
W: ptgcn.com

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

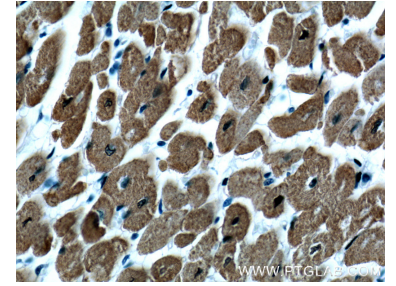
Selected Validation Data



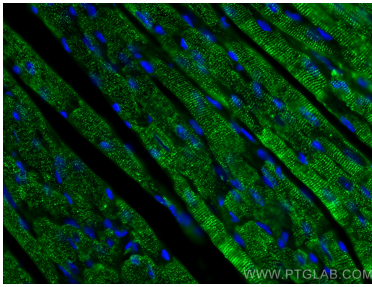
Various lysates were subjected to SDS PAGE followed by western blot with 66419-1-Ig (Calsequestrin 2 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



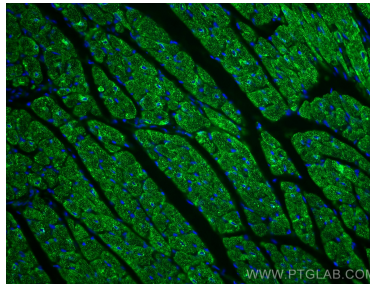
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66419-1-Ig (Calsequestrin 2 antibody at dilution of 1:400 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66419-1-Ig (Calsequestrin 2 antibody at dilution of 1:400 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Calsequestrin 2 antibody (66419-1-Ig, Clone: 1C10A1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Calsequestrin 2 antibody (66419-1-Ig, Clone: 1C10A1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).