For Research Use Only

Calsequestrin 2 Monoclonal antibody

Catalog Number:66419-1-Ig

1 Publications

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Basic Information

Catalog Number:
66419-1-Ig

Size:
150ul , Concentration: 1500 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2a

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:
Protein A purification

CloneNo.:
1C10A1

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:50-1:500
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF-P, 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-P : 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

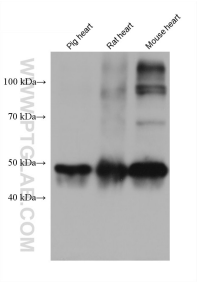
Storage

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

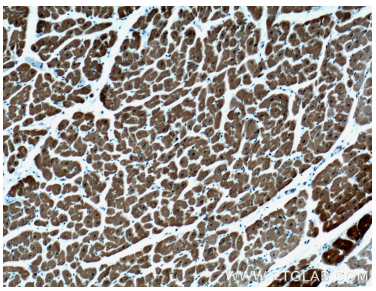
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

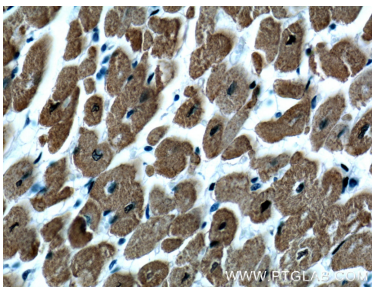
Selected Validation Data



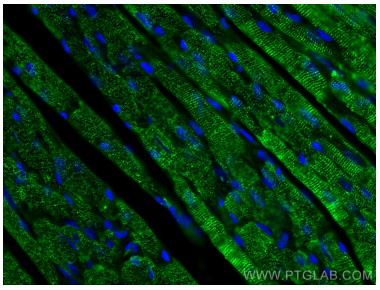
Various lysates were subjected to SDS PAGE followed by western blot with 66419-1-Ig (Calsequestrin 2 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



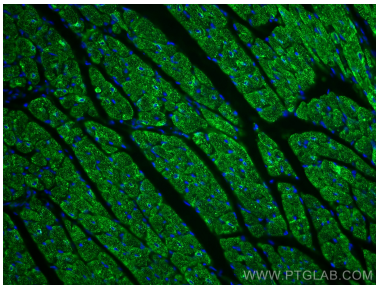
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66419-1-Ig (Calsequestrin 2 antibody at dilution of 1:400 (under 10x lens).



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 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 Goat Anti-Mouse IgG(H+L).