For Research Use Only

Calsequestrin 2 Monoclonal antibody

Catalog Number:66419-1-lg 1 Publications



Basic Information

Catalog Number: 66419-1-lg

GeneID (NCBI): Size: 1500 µg/ml **UNIPROT ID:** Source:

Mouse 014958 Full Name: Isotype: IgG2a calsequestrin 2 (cardiac muscle)

Calculated MW: Immunogen Catalog Number:

AG13246 46 kDa

> Observed MW: 50 kDa

BC022288

GenBank Accession Number:

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: 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-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

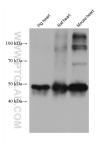
Storage

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

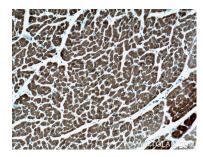
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

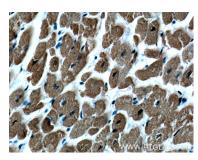
Selected Validation Data



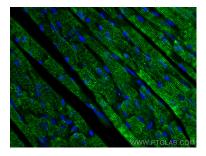
Various lysates were subjected to SDS PAGE followed by western blot with 66419-1-1g (Calsequestrin 2 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



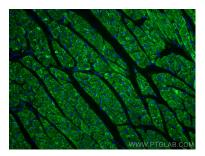
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 66419-1- lg (Calsequestrin 2 antibody at dilution of 1:400 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human heart tissue slide using 66419-1- \lg (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).