For Research Use Only

Calsequestrin 2 Polyclonal antibody

Catalog Number: 18422-1-AP

Featured Product

15 Publications



Basic Information

Catalog Number: GenBank Accession Number: 18422-1-AP BC022288

Concentration: GeneID (NCBI): 500 µg/ml 845

Source: UNIPROT ID: Rabbit 014958

Isotype: Full Name:

IgG calsequestrin 2 (cardiac muscle)

Immunogen Catalog Number: Calculated MW: AG13246 46 kDa

Observed MW: 50 kDa

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

Purification Method:

WB 1:2000-1:16000 IHC 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

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 Kurtzwald-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

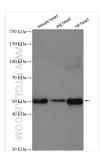
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

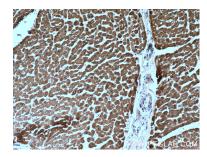
W: ptgcn.co

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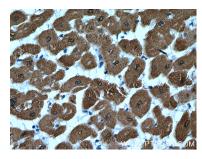
Selected Validation Data



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



Immunohistochemical analysis of paraffinembedded 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 $\lg G(H+L)$.