

CASQ2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19929c

Specification

CASQ2 Antibody (Center) - Product Information

Application WB,E
Primary Accession 014958

Other Accession <u>P31235</u>, <u>NP 001223.2</u>

Reactivity
Predicted
Rabbit
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Rabbit
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG
79-107

CASQ2 Antibody (Center) - Additional Information

Gene ID 845

Other Names

Calsequestrin-2, Calsequestrin, cardiac muscle isoform, CASQ2

Target/Specificity

This CASQ2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 79-107 amino acids from the Central region of human CASQ2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

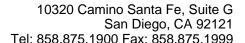
Precautions

CASQ2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CASQ2 Antibody (Center) - Protein Information

Name CASQ2

Function Calsequestrin is a high-capacity, moderate affinity, calcium- binding protein and thus





acts as an internal calcium store in muscle. Calcium ions are bound by clusters of acidic residues at the protein surface, especially at the interface between subunits. Can bind around 60 Ca(2+) ions. Regulates the release of lumenal Ca(2+) via the calcium release channel RYR2; this plays an important role in triggering muscle contraction. Plays a role in excitation-contraction coupling in the heart and in regulating the rate of heart beats.

Cellular Location

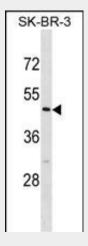
Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:O09161}. Note=This isoform of calsequestrin occurs in the sarcoplasmic reticulum's terminal cisternae luminal spaces of cardiac and slow skeletal muscle cells {ECO:0000250|UniProtKB:O09161}

CASQ2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

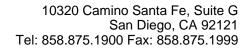
CASQ2 Antibody (Center) - Images



CASQ2 Antibody (Center) (Cat. #AP19929c) western blot analysis in SK-BR-3 cell line lysates (35ug/lane). This demonstrates the CASQ2 antibody detected the CASQ2 protein (arrow).

CASQ2 Antibody (Center) - Background

The protein encoded by this gene specifies the cardiac muscle family member of the calsequestrin family. Calsequestrin is localized to the sarcoplasmic reticulum in cardiac and slow skeletal muscle cells. The protein is a calcium binding protein that stores calcium for muscle function. Mutations in this gene 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. [provided





by RefSeq].

CASQ2 Antibody (Center) - References

Kirchhefer, U., et al. J. Mol. Cell. Cardiol. 49(1):95-105(2010) Wong, C.H., et al. Forensic Sci. Int. 192 (1-3), 53-55 (2009) : Liu, J., et al. Am. J. Physiol., Cell Physiol. 297 (1), C152-C159 (2009) : Hayashi, M., et al. Circulation 119(18):2426-2434(2009) Wei, L., et al. Cell Calcium 45(5):474-484(2009)