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CASQ2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19929c

Product Information

Application	WB, E
Primary Accession	O14958
Other Accession	P31235, NP_001223.2
Reactivity	Human
Predicted	Rabbit, Bovine, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41817
Calculated MW	46436
Antigen Region	79-107

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 E~~Use at an assay dependent concentration.
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.

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}

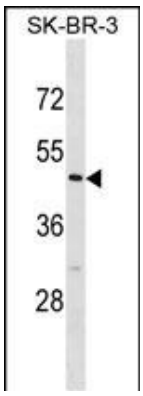
Background

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].

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)
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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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.