

CASQ2 Blocking Peptide (Center)
Synthetic peptide
Catalog # BP19929c**Specification**

CASQ2 Blocking Peptide (Center) - Product Information

Primary Accession [O14958](#)
Other Accession [P31235](#), [NP_001223.2](#)

CASQ2 Blocking Peptide (Center) - Additional Information

Gene ID 845

Other Names

Calsequestrin-2, Calsequestrin, cardiac muscle isoform, CASQ2

Target/Specificity

The synthetic peptide sequence is selected from aa 94-107 of HUMAN CASQ2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CASQ2 Blocking Peptide (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 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

CASQ2 Blocking Peptide (Center) - Images

CASQ2 Blocking Peptide (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 Blocking Peptide (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)