

**CASQ2 / Calsequestrin 2 Antibody (clone 1C6)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14317****Specification**

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**CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - Product Information**

Application	IHC
Primary Accession	<a href="#">O14958</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	46kDa KDa

**CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - Additional Information****Gene ID** 845**Other Names**

Calsequestrin-2, Calsequestrin, cardiac muscle isoform, CASQ2

**Target/Specificity**

Human Calsequestrin

**Reconstitution & Storage**

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

**Precautions**

CASQ2 / Calsequestrin 2 Antibody (clone 1C6) is for research use only and not for use in diagnostic or therapeutic procedures.

**CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - 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**

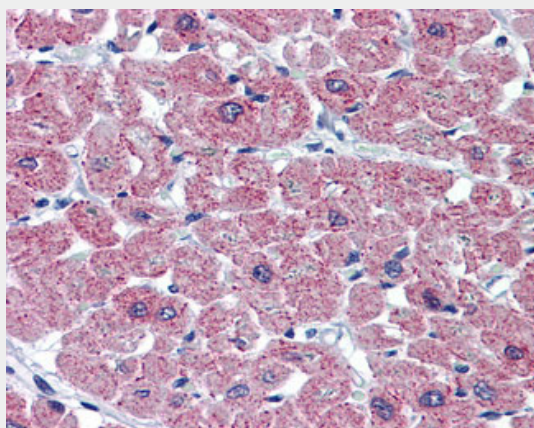
Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:O09161}. Note=This isoform of calsequestrin occurs in the sarcoplasmic reticulum's terminal cisternae luminal spaces of cardiac and slow skeletal muscle cells {ECO:0000250|UniProtKB:O09161}

## CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - Protocols

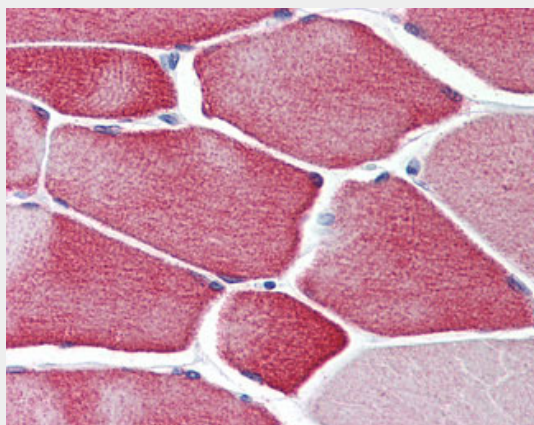
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - Images



Anti-CASQ2 / Calsequestrin antibody IHC of human heart.



Anti-CASQ2 / Calsequestrin antibody IHC of human skeletal muscle.

## CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - Background

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  $\text{Ca}(2+)$  ions. Regulates the release of luminal  $\text{Ca}(2+)$  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.

## CASQ2 / Calsequestrin 2 Antibody (clone 1C6) - References

Tanaka T.,et al.Submitted (JUN-1995) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Gregory S.G.,et al.Nature 441:315-321(2006).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).