

**Anti-Calsequestrin 1 Monoclonal Antibody**  
**Catalog # ABO14661****Specification**

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**Anti-Calsequestrin 1 Monoclonal Antibody - Product Information**

Application	WB, IHC, FC
Primary Accession	<a href="#">P31415</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Calsequestrin 1 Monoclonal Antibody . Tested in WB, IHC, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Calsequestrin 1 Monoclonal Antibody - Additional Information**

**Gene ID** 844

**Other Names**

Calsequestrin-1, Calmitine, Calsequestrin, skeletal muscle isoform, CASQ1, CASQ

**Application Details**

WB 1:1000-1:5000<br>IHC 1:50-1:200<br>FC 1:100

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Calsequestrin 1 Calsequestrin is a high-capacity, moderate affinity, calcium-binding protein and thus acts as an internal calcium store in muscle. The release of calcium bound to calsequestrin through a calcium release channel triggers muscle contraction. Binds 40 to 50 moles of calcium. Also binds laminin.

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-Calsequestrin 1 Monoclonal Antibody - Protein Information**

**Name** CASQ1

## Synonyms CASQ

### Function

Calsequestrin is a high-capacity, moderate affinity, calcium- binding protein and thus acts as an internal calcium store in muscle (PubMed:<a href="http://www.uniprot.org/citations/28895244" target="\_blank">28895244</a>). Calcium ions are bound by clusters of acidic residues at the protein surface, often at the interface between subunits. Can bind around 80 Ca(2+) ions (PubMed:<a href="http://www.uniprot.org/citations/28895244" target="\_blank">28895244</a>). Regulates the release of luminal Ca(2+) via the calcium release channel RYR1; this plays an important role in triggering muscle contraction. Negatively regulates store-operated Ca(2+) entry (SOCE) activity (PubMed:<a href="http://www.uniprot.org/citations/27185316" target="\_blank">27185316</a>).

### Cellular Location

Endoplasmic reticulum Sarcoplasmic reticulum. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P07221}. Sarcoplasmic reticulum membrane; Peripheral membrane protein; Luminal side {ECO:0000250|UniProtKB:P07221}. Mitochondrion matrix {ECO:0000250|UniProtKB:O09165}. Note=This isoform of calsequestrin occurs in the sarcoplasmic reticulum's terminal cisternae luminal spaces of fast skeletal muscle cells. Preferentially forms linear and round aggregates in the endoplasmic reticulum (ER) of resting cells (PubMed:28895244). In a minority of cells, homogeneously detected in the ER lumen (PubMed:28895244). Colocalizes with STIM1 at endoplasmic reticulum in response to a depletion of intracellular calcium (PubMed:27185316). {ECO:0000250|UniProtKB:P07221, ECO:0000269|PubMed:27185316, ECO:0000269|PubMed:28895244}

### Tissue Location

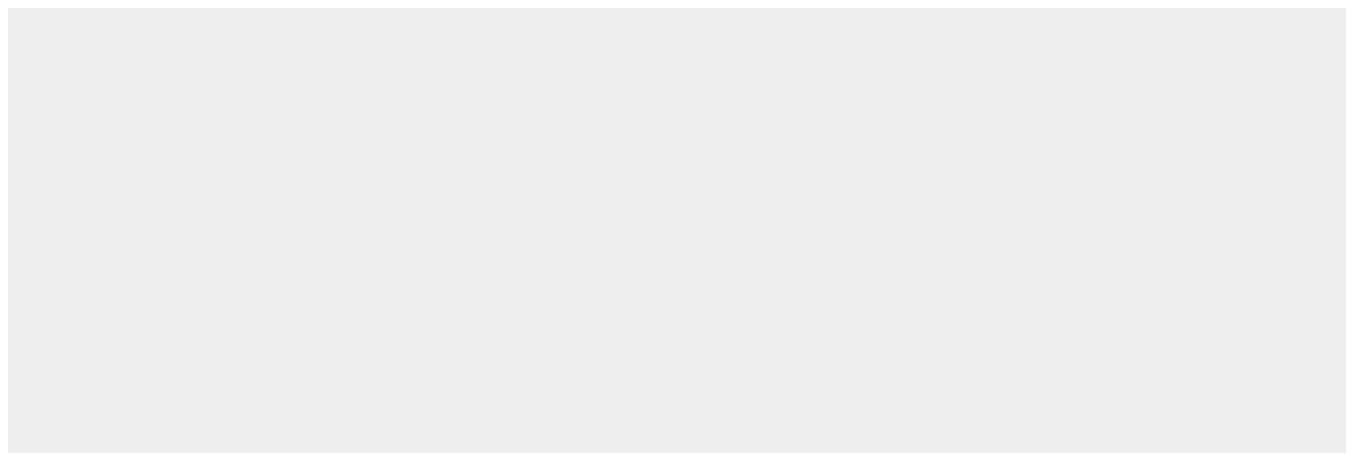
Expressed in myoblasts (at protein level).

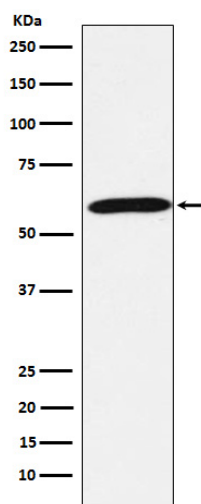
## Anti-Calsequestrin 1 Monoclonal Antibody - Protocols

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](#)

## Anti-Calsequestrin 1 Monoclonal Antibody - Images





Western blot analysis of Calsequestrin 1 expression in Human skeletal muscle lysate.