

CASQ1 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI15094**Specification**

CASQ1 antibody - middle region - Product Information

Application	WB
Primary Accession	P31415
Other Accession	NM_001231 , NP_001222
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44kDa KDa

CASQ1 antibody - middle region - Additional Information**Gene ID** 844**Alias Symbol** CASQ, PDIB1**Other Names**

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

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-CASQ1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

CASQ1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

CASQ1 antibody - middle region - 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: [28895244](http://www.uniprot.org/citations/28895244)). 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: [28895244](http://www.uniprot.org/citations/28895244)).

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:27185316).

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

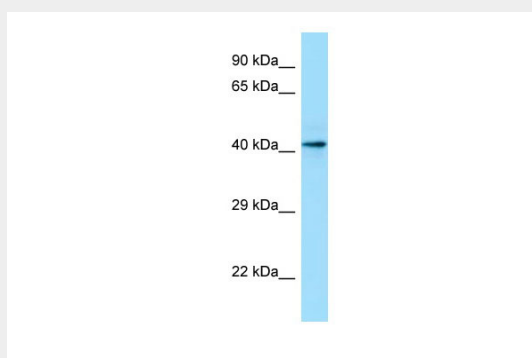
Expressed in myoblasts (at protein level).

CASQ1 antibody - middle region - 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](#)

CASQ1 antibody - middle region - Images



WB Suggested Anti-CASQ1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal kidney

CASQ1 antibody - middle region - References

Fujii J., et al. Somat. Cell Mol. Genet. 16:185-189(1990).
Bataille N., et al. Biochem. Biophys. Res. Commun. 203:1477-1482(1994).
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 (SEP-2005) to the EMBL/GenBank/DDBJ databases.