

Recombinant Anti-CASQ1 Rabbit mAb

Catalog # AP95194

Product Information

Application	WB, IHC, FC
Primary Accession	P31415
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	45160

Additional Information

Gene ID	844
Other Names	CASQ; Calsequestrin-1; Calmitin; Calsequestrin, skeletal muscle isoform
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human CASQ1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

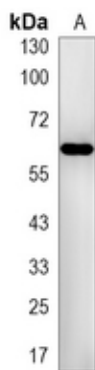
Name	CASQ1
Synonyms	CASQ
Function	Calsequestrin is a high-capacity, moderate affinity, calcium- binding protein and thus acts as an internal calcium store in muscle (PubMed: 28895244). Calcium ions are bound by clusters of acidic residues at the protein surface, often at the interface between subunits. Can bind around 80 Ca(2+) ions (PubMed: 28895244). 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).

Images



Western blot analysis of CASQ1 expression in human skeletal muscle (A) whole cell lysates. (Predicted band size: 45 kD; Observed band size: 63 kD)

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