

Rabbit anti-Human Calsequestrin 1 Polyclonal Antibody | anti-CASQ1 antibody

Anti-Calsequestrin 1 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255696	Rabbit	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA

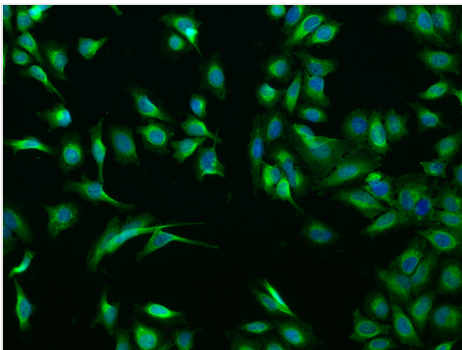
PRODUCT SYNONYMS

Calsequestrin 1; Polyclonal Antibody; Anti-Calsequestrin 1 Antibody; Rabbit Polyclonal; Calsequestrin 1/CASQ1 Antibody; Rabbit PAb; Antigen Affinity Purified; calsequestrin 1 (fast-twitch; skeletal muscle); Anti-CASQ Antibody; Anti-PDIB1 Antibody; Anti-VMCQA Antibody; anti-CASQ1 antibody

PRODUCT SPECIFICATIONS

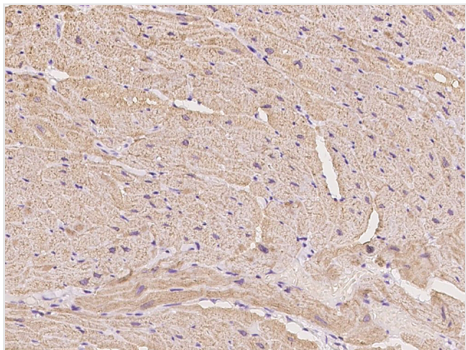
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human Calsequestrin 1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CASQ1 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA
Immunogen	Recombinant Human Calsequestrin 1/CASQ1 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human Calsequestrin 1/CASQ1 (rh Calsequestrin 1/CASQ1). Calsequestrin 1/CASQ1 specific IgG was purified by Human Calsequestrin 1/CASQ1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



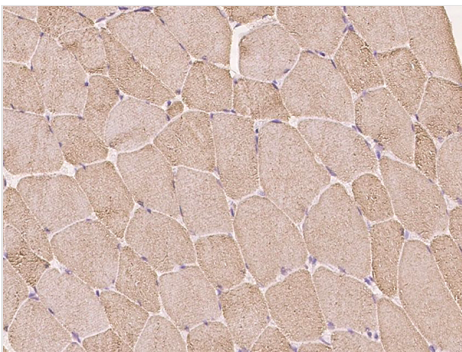
IF (Immunofluorescence)

Immunofluorescence staining of CASQ1 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human CASQ1 polyclonal antibody (dilution ratio 1:200) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to Cytoplasm.



IHC (Immunohistochemistry)

Immunochemical staining of CASQ1 in cynomolgus heart with rabbit polyclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohistochemistry)

Immunochemical staining of CASQ1 in human skeletal muscle with rabbit polyclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

Related Product Information for anti-CASQ1 antibody	Calsequestrin-1 is an isoform of calsequestrin. Calsequestrin is a calcium-binding protein of the sarcoplasmic reticulum. It helps hold calcium in the cisterna of the sarcoplasmic reticulum after a muscle contraction, even though the concentration of calcium in the sarcoplasmic reticulum is much higher than in the cytosol. Two forms of calsequestrin have been identified: Calsequestrin-2 and Calsequestrin-1. Calsequestrin-1 is found in fast skeletal muscle. The release of calsequestrin-bound calcium (through a calcium release channel) triggers muscle contraction. The active protein is not highly structured, more than 5% of it adopting a random coil conformation. When calcium binds there is a structural change whereby the alpha-helical content of the protein increases from 3 to 11%. Both forms of calsequestrin are phosphorylated by casein kinase 2, but the cardiac form is phosphorylated more rapidly and to a higher degree. Calsequestrin-1 is also secreted in the gut where it deprives bacteria of calcium ions.
References	Slupsky JR, et al. (1987) Characterization of cardiac calsequestrin. Biochemistry. 26(20): 6539-44. Cala SE, et al. (1991) Phosphorylation of cardiac and skeletal muscle calsequestrin isoforms by casein kinase II. Demonstration of a cluster of unique rapidly phosphorylated sites in cardiac calsequestrin. J Biol Chem. 266(1):391-8. Wang S, et al. (1998) Crystal structure of calsequestrin from rabbit skeletal muscle sarcoplasmic reticulum. Nat Struct Biol. 5(6):476-83.

NCBI AND UNIPROT INFORMATION

UniProt Accession #	P31415
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

