

Calsequestrin-1 / CASQ1 Recombinant Protein | CASQ1 recombinant protein

Recombinant Human Calsequestrin-1 / CASQ1 Protein

CATALOG #
AAA173523

HOST
E Coli

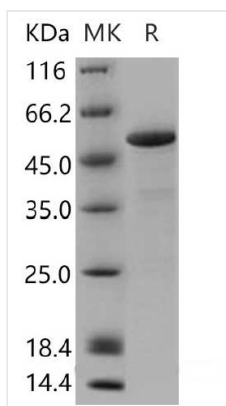
PRODUCT SYNONYMS

Calsequestrin-1 / CASQ1; Recombinant Human Calsequestrin-1 / CASQ1 Protein; CASQ1; CASQ; PDIB1; VMCQA; CASQ1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 80% as determined by reducing SDS-PAGE
Form/Format	Liquid; Lyophilized supplied as sterile 50mM Tris, 10% glycerol, pH 7.5
Concentration	1.13mg/ml (varies by lot)
Sequence Length	396
Sequence	Gln35-Asp396
Preparation and Storage	Ships on blue ice. Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CASQ1 recombinant protein	Background: 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 50% 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. Description: A DNA sequence encoding the mature form of human CASQ1 (P31415) (Gln35-Asp396) was expressed with a N-terminal Met.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	227430327
NCBI GeneID	844
NCBI Accession #	NP_001222.3
NCBI GenBank Nucleotide #	NM_001231.4
UniProt Accession #	P31415; Q8TBW7; B1AKZ2; B2R863
Molecular Weight	Molecular MasS: 41.8 kDa AP Molecular Mass: 52 kDa
NCBI Official Full Name	calsequestrin-1
NCBI Official Synonym Full Names	calsequestrin 1
NCBI Official Symbol	CASQ1
NCBI Official Synonym Symbols	CASQ; PDIB1; VMCQA
NCBI Protein Information	calsequestrin-1
UniProt Protein Name	Calsequestrin-1
UniProt Gene Name	CASQ1
UniProt Synonym Gene Names	CASQ

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.