



Rabbit Anti-Calsequestrin antibody

SL20346R

Product Name:	Calsequestrin
Chinese Name:	肌钙集蛋白/收钙素抗体
Alias:	CASQ; Calsequestrin 1; Calsequestrin 1 fast twitch skeletal muscle; Calsequestrin 2; Calsequestrin 2 fast twitch cardiac muscle; Calsequestrin cardiac muscle isoform; Calsequestrin skeletal muscle isoform; Cardiac calsequestrin 2; CASQ 1; CASQ 2; PDIB1; PDIB2; Skeletal muscle calsequestrin 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	40kDa
Cellular localization:	cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Calsequestrin:1-100/396
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The sarcoplasmic reticulum (SR) is, in part, responsible for maintaining the level of intracellular calcium in cardiac and skeletal muscle by storing and releasing calcium. Several intralumenal SR calcium binding proteins have been identified, the most prominent of these is calsequestrin. Calsequestrin is a calcium binding protein known to

sequester calcium accumulated in the sarcoplasmic reticulum of muscle cells during relaxation and is found discretely localized to the junctional and corbular (terminal cisternae) SR. Calsequestrin functions to localize calcium near the junctional face of the terminal cisternae from which calcium can be released into the cytosol via the ryanodine receptor. This protein is highly acidic and has a large capacity and moderate to low affinity for calcium.

Function:

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. The skeletal muscle isoform (CASQ1) binds around 80 Ca(2+) ions, while the cardiac isoform (CASQ2) binds approximately 60 Ca(2+).

Subcellular Location:

Sarcoplasmic reticulum lumen. Mitochondrion. Note=This isoform of calsequestrin occurs in the sarcoplasmic reticulum's terminal cisternae luminal spaces of fast skeletal muscle cells. Also mitochondrial according to PubMed:7945294.

Similarity:

Belongs to the calsequestrin family.

SWISS:

P31415

Gene ID:

844

Database links:

[Entrez Gene: 844](#)Human

[Entrez Gene: 12372](#)Mouse

[Entrez Gene: 686019](#)Rat

[Omim: 114250](#)Human

[SwissProt: P31415](#)Human

[SwissProt: O09165](#)Mouse

[SwissProt: P19633](#)Rat

[Unigene: 632476](#)Human

[Unigene: 12829](#)Mouse

[Unigene: 159963](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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