

# Dog CASQ2 Recombinant Protein



RPPB3484

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## Product Information    Protein Information

**Product SKU:**

RPPB3484

**Accession:**

P12637

**Host:**

Dog Heart.

**Protein description:**

Calsequestrin is the major calcium storage protein of the sarcoplasmic reticulum. Intraluminal  $Ca^{2+}$  binds to calsequestrin during diastole to prevent  $Ca^{2+}$  precipitation and to lower its free ionic concentration to facilitate efficient storage. During systole, Calsequestrin coordinately releases ~40--50  $Ca^{2+}$  ions per molecule for each contraction-relaxation cycle by an uncertain mechanism. Calsequestrin has been shown to be of major importance in the regulation of cardiac excitation-contraction coupling.

**Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

**Synonyms:**

Calsequestrin-2, Calsequestrin cardiac muscle isoform, CASQ2, CSQ.

**Formulation:**

The protein was lyophilized from a concentrated solution (1mg/ml) containing 10mM Tris-HCl and 1mM EGTA.

**Purity:**

Greater than 90% as determined by SDS-PAGE.

**Solubility:**

It is recommended to reconstitute the lyophilized CASQ2 in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:**

Lyophilized CASQ2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CASQ2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.