

32-3656: Dog CASQ2 Native Protein

Alternative Name : Calsequestrin-2, Calsequestrin cardiac muscle isoform, CASQ2, CSQ.

Description

Source : Dog Heart. 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 $\sim 40\text{-}50$ 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.

Product Info

Amount :	5 μg
Purification :	Greater than 90% as determined by SDS-PAGE.
Content :	The protein was lyophilized from a concentrated solution (1mg/ml) containing 10mM Tris-HCl and 1mM EGTA.
Storage condition :	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.

Application Note

It is recommended to reconstitute the lyophilized CASQ2 in sterile 18M-cm H_2O not less than $100\text{ }\mu\text{g/ml}$, which can then be further diluted to other aqueous solutions.

