

# **California Bioscience**

# **Product Datasheet**

Product Name	Calsequestrin
Cata No	CB501031
Source	Dog Heart
Synonyms	Calsequestrin-2, Calsequestrin cardiac muscle isoform, CASQ2, CSQ.

## Description

Calsequestrin is the major calcium storage protein of the sarcoplasmic reticulum. Intraluminar  $Ca^{2+}$ 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 ~4050  $Ca^{2+}$  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.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### Formulation

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

## 1mM EGTA.

#### Stability

Lyophilized Calsequestrin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Calsequestrin 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.** 

# Applications

Immunoblots Absorption Immunohistochemistry