



Product Datasheet

Product Name	Cardiac Actin
Cata No	CB501134
Source	<i>Bovine Heart</i>
Synonyms	Actin alpha cardiac muscle 1, Alpha-cardiac actin, ACTC1, ACTC.

Description

Alpha-cardiac actin belongs to the actin family which is comprised of three main groups of actin isoforms, alpha, beta, and gamma. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. Defects in the cardiac actin have been associated with idiopathic dilated cardiomyopathy (IDC) and familial hypertrophic cardiomyopathy (FHC).

Ultra pure Cardiac Actin having a Molecular mass of 43,000 dalton.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized from a 1mg/ml solution containing 10mM Tris-acetate buffer pH 8.0, 0.2mM

CaCl₂, 0.2mM ATP, 1mM DTT and 0.5% SDS.

Reconstitution

It is recommended to reconstitute the lyophilized Cardiac Actin in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

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

Protein standard in 1D and 2D SDS
gelelectrophoresis
Immunoassays
Immunization

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