



Product Datasheet

Product Name	Cardiac Troponin C Human Recombinant
Cata No	CB500943
Source	<i>Escherichia Coli.</i>
Synonyms	Troponin C slow skeletal and cardiac muscles, TN-C, TNNC1, TNNC, TNC, CMD1Z.

Description

Troponin is a fundamental regulatory protein of striated muscle contraction, and together with tropomyosin, is positioned on the actin filament. Troponin has 3 subunits: TnI- the inhibitor of actomyosin ATPase; TnT- contains the binding site for tropomyosin; and TnC- the protein encoded by the TNNC1 gene. The binding of calcium to TnC stops the inhibitory action of TnI, consequently allowing the interaction of actin with myosin, the hydrolysis of ATP, and the generation of tension. Mutations in the TNNC1 gene are linked to cardiomyopathy dilated type 1Z. Recombinant Human TNC produced in E.Coli is a single, non-glycosylated, polypeptide chain having a molecular mass of 18,020 Dalton. The TNC is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Purity

Greater than 95.0% as determined by both:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

The protein solution contains 150mM NaCl, 10mM sodium phosphate, 0.05% NaN₃, pH 7.0.

Stability

TNC although stable at room temperature for 3 weeks, should be stored at 4°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.