

Cardiac Troponin I

Cat. No. CDA009 **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Source	Human Heart
Description	Troponin is a complex of three regulatory proteins that is integral to muscle contraction in skeletal and cardiac muscle, but not smooth muscle. Troponin is attached to the protein tropomyosin and lies within the groove between actin filaments in muscle tissue. Troponin I is a part of the troponin complex. It binds to actin in thin myofilaments to hold the troponin-tropomyosin complex in place. The letter I is given due to its inhibitory character.
Format	Purified, Tris buffer, pH 7.5 (5mM EDTA, 15mM mercaptoethanol, 20mM Tris). Solubility is limited at neutral pH and physiological salt concentration.
Purification	>85% pure (SDS-PAGE). Immunological activity confirmed by reaction with monoclonal antibody that is specific for the troponin I cardiac isoform in immunoblotting.
Concentration	0.5mg/ml (Roche ECLIA)
Buffer	5mM EDTA, 15mM mercaptoethanol, 20mM Tris
Applications	Suitable for use as a standard in immunoassay, immunogen for antisera production, and tracer for iodination. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in

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such assays should not necessarily be excluded.

Storage

Short-term (up to 2 months) store at < -20°C. Long term (>2 months) store at <-40°C. Avoid multiple freeze/thaw cycle.

Warnings

A blood sample form the tissue donor tested negative for HIV 1, HIV 2, HCV antibodies and HBsAg and Syphilis. No test guarantees a product to be non-infectious. Therefore, all material derived from human fluids or tissues should be considered as potentially infectious.

GENE INFORMATION

Gene Name

TNNC1

Synonyms

troponin C type 1 (slow); TNC; TNNC; CMD1Z; troponin C, slow; TNNC1_HUMAN; Troponin C, slow skeletal and cardiac muscles; TN-C; Troponin-C1, slow; cardiac troponin C.

Gene ID

7134

mRNA Refseq

NM_003280

Protein Refseq

NP_003271

MIM

191040

UniProt ID

P63316

**Chromosome
Location**

3p21.3-p14.3

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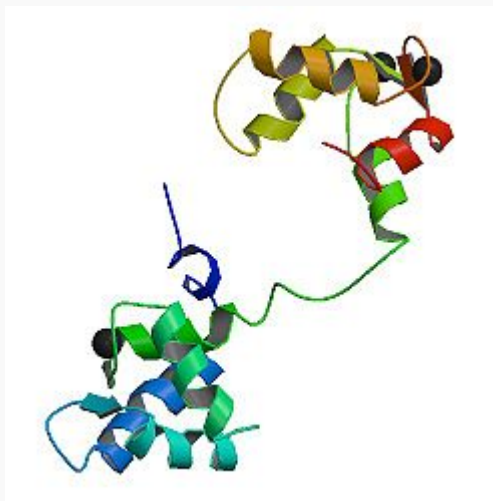
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Function

actin filament binding; calcium ion binding; calcium-dependent protein binding; protein homodimerization activity; troponin I binding; troponin T binding.

PDBrendering based
on 1y8x. Available
structures: 1y8x, 2nvu



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