

## Recombinant Human Troponin C Type 1 (slow), His-tagged

Cat. No. TNNC1-6896H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human TNNC1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques. MW: 20.5 kDa.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-161aa
<b>Description</b>	TNNC1 is a member of troponins family. Troponin has 3 subunits, Troponin I(Tn-I), Troponin T(Tn-T) and Troponin C(Tn-C). Tn-I subunit inhibits actomyosin ATPase and Tn-T subunit binds tropomyosin and Tn-C, while Tn-C subunit binds calcium and overcomes the inhibitory action of the troponin complex on actin filaments. TNNC1 is dumbbell-shaped and has a hydrophobic pocket that increases the contractile force of muscle fibers.
<b>Form</b>	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl.
<b>Molecular Mass</b>	20.5 kDa (181aa), confirmed by MALDI-TOF
<b>AA Sequence</b>	MGSSHHHHHH SSGLVPRGSH MDDIYKAAVE QLTEEKNEF KAAFDIFVLG AEDGCISTKE LGKVMRMLGQ NPTPEELQEM IDEVDEDGSG TVDFDEFLVM MVRCKMDDSK GKSEEELSDL FRMFDKNADG YIDLDELKIM LQATGETITE

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DDIEELMKDG DKNNDGRIDY DEFLEFMKGV E

**Purity** >95% by SDS-PAGE

**Applications** SDS-PAGE

**Storage** Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**Concentration** 1 mg/ml (determined by Bradford assay)

## GENE INFORMATION

**Gene Name** [TNNC1 troponin C type 1 \(slow\) \[ Homo sapiens \]](#)

**Official Symbol** TNNC1

**Synonyms** TNNC1; troponin C type 1 (slow); TNNC, troponin C, slow; troponin C, slow skeletal and cardiac muscles; troponin C1, slow; cardiac troponin C; slow twitch skeletal/cardiac muscle troponin C; TNC; TN-C; TNNC; CMD1Z; CMH13;

**Gene ID** [7134](#)

**mRNA Refseq** [NM\\_003280](#)

**Protein Refseq** [NP\\_003271](#)

**MIM** [191040](#)

**UniProt ID** [P63316](#)

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<b>Chromosome Location</b>	3p21.1
<b>Pathway</b>	Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Cardiac muscle contraction, organism-specific biosystem; Cardiac muscle contraction, conserved biosystem; Dilated cardiomyopathy, organism-specific biosystem; Dilated cardiomyopathy, conserved biosystem; Hypertrophic cardiomyopathy (HCM), organism-specific biosystem;
<b>Function</b>	actin filament binding; calcium ion binding; calcium-dependent protein binding; protein binding; protein homodimerization activity; troponin I binding; troponin I binding; troponin T binding;

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