

Product datasheet for PH307014

Troponin C1 (TNNC1) (NM_003280) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	TNNC1 MS Standard C13 and N15-labeled recombinant protein (NP_003271)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC207014
Predicted MW:	18.4 kDa
Protein Sequence:	>RC207014 protein sequence Red=Cloning site Green=Tags(s) MDDIYKAAVEQLTEEQNEFKAAFDIFVLGAEDGCISTKELGKVMRMLGQNPTPEELQEMIDEVDEDEGSG TVDFDEFLVMMVRCMKDDSKGKSEEELSDLFRMFDKNADGYIDLDELKIMLQATGETITEDDIEELMKDG DKNNDGRIDYDEFLEFMKGVE TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_003271</u>
RefSeq Size:	705
RefSeq ORF:	483
Synonyms:	CMD1Z; CMH13; TN-C; TNC; TNNC
Locus ID:	7134
UniProt ID:	<u>P63316</u> , <u>Q6FH91</u>



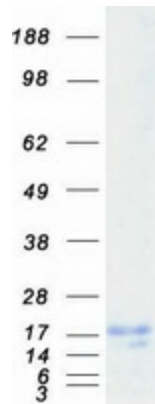
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Cytogenetics: 3p21.1

Summary: Troponin is a central regulatory protein of striated muscle contraction, and together with tropomyosin, is located on the actin filament. Troponin consists of 3 subunits: TnI, which is the inhibitor of actomyosin ATPase; TnT, which contains the binding site for tropomyosin; and TnC, the protein encoded by this gene. The binding of calcium to TnC abolishes the inhibitory action of TnI, thus allowing the interaction of actin with myosin, the hydrolysis of ATP, and the generation of tension. Mutations in this gene are associated with cardiomyopathy dilated type 1Z. [provided by RefSeq, Oct 2008]

Protein Pathways: Calcium signaling pathway, Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

Product images:



Coomassie blue staining of purified TNNC1 protein (Cat# [TP307014]). The protein was produced from HEK293T cells transfected with TNNC1 cDNA clone (Cat# [RC207014]) using MegaTran 2.0 (Cat# [TT210002]).