

Native Human TNNI3

Cat. No. TNNI3-221H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Native Human TNNI3 was purified from Human cardiac tissue by Tn-C affinity chromatography.
Species	Human
Source	Human Cardiac
Description	Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM).
Molecular Mass	24 KDa
Formulation	Liquid
Storage buffer	8 M Urea, 50 mM Tris.HCl, 15 mM β-mercaptoethanol, 1 mM EDTA (pH 8.0)
Biological activity	SDS PAGE profile of a typical recombinant Troponin-I preparation (3.8ug) showed a major band at 24kDa and a minor band attributable to Troponin-I dimer. Please note: Troponin-I is very susceptible to proteolytic breakdown within cardiac tissue and it is

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difficult to isolate undegraded native human cardiac troponin-I. This product is greater than 70% intact and hence proteolytic fragments can be observed.

Storage Aliquot and store at -80°C. Avoid repeated freeze / thaw cycles.

OfficialSymbol TNNI3

GENE INFORMATION

Gene Name TNNI3 troponin I type 3 (cardiac) [Homo sapiens]

Synonyms TNNI3; troponin I type 3 (cardiac); CMH7; RCM1; cTnI; CMD2A; TNNC1; MGC116817; TNNI3; troponin I, cardiac; Troponin I, cardiac muscle; Cardiac troponin I; familial hypertrophic cardiomyopathy 7

Gene ID 7137

mRNA Refseq NM_000363

Protein Refseq NP_000354

MIM 191044

UniProt ID P19429

Chromosome Location 19q13.4

Pathway Hypertrophic cardiomyopathy (HCM); Muscle contraction; Cardiac muscle contraction

Function actin binding; calcium-dependent protein binding; protein domain specific binding; protein kinase binding; troponin C binding; troponin T binding; calcium channel

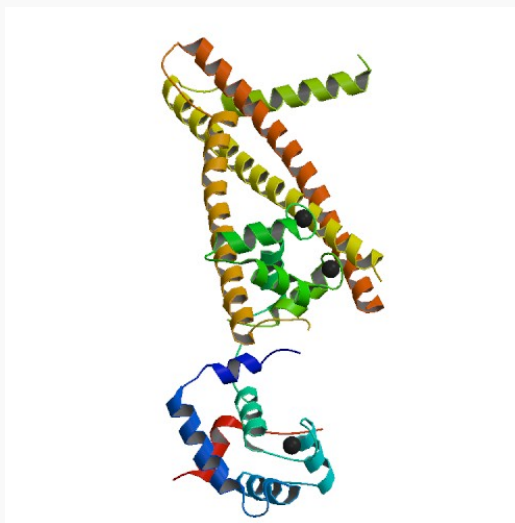
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inhibitor activity

PDB rendering
based on 1j1d.



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