

Recombinant Human TNNT3 protein, His-tagged

Cat. No. TNNT3-7953H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TNNT3 aa. (Arg147~Lys269) fused with N-terminal His tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Arg147~Lys269
Description	The binding of Ca(2+) to the trimeric troponin complex initiates the process of muscle contraction. Increased Ca(2+) concentrations produce a conformational change in the troponin complex that is transmitted to tropomyosin dimers situated along actin filaments. The altered conformation permits increased interaction between a myosin head and an actin filament which, ultimately, produces a muscle contraction. The troponin complex has protein subunits C, I, and T. Subunit C binds Ca(2+) and subunit I binds to actin and inhibits actin-myosin interaction. Subunit T binds the troponin complex to the tropomyosin complex and is also required for Ca(2+)-mediated activation of actomyosin ATPase activity. There are 3 different troponin T genes that encode tissue-specific isoforms of subunit T for fast skeletal-, slow skeletal-, and cardiac-muscle. This gene encodes fast skeletal troponin T protein; also known as troponin T type 3. Alternative splicing results in multiple transcript variants encoding additional distinct troponin T type 3 isoforms. A developmentally regulated switch between fetal/neonatal and adult troponin T type 3 isoforms occurs. Additional splice variants have been described but their biological validity has not

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	been established. Mutations in this gene may cause distal arthrogryposis multiplex congenita type 2B (DA2B).
Form	Freeze-dried powder
Molecular Mass	18kDa as determined by SDS-PAGE reducing conditions.
Endotoxin	<1.0EU per 1ug (determined by the LAL method)
Purity	>98%
Characteristic	The isoelectric point is 10.1.
Applications	SDS-PAGE; WB; ELISA; IP; CoIP; Purification; Amine Reactive Labeling
Stability	The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage Buffer	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5%Trehalose and Proclin300.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name TNNT3 troponin T3, fast skeletal type [Homo sapiens (human)]

Official Symbol TNNT3

Synonyms TNNT3; troponin T3, fast skeletal type; TNTF; troponin T, fast skeletal muscle; beta-TnTF; fTnT; troponin T type 3 (skeletal, fast)

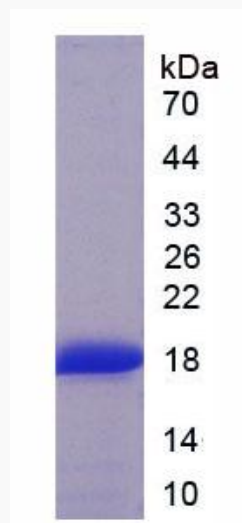
Gene ID 7140

mRNA Refseq NM_001042780.2

Protein Refseq NP_001036245.1

UniProt ID P45378

SDS-PAGE



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