

## Product datasheet for TP312563

### TNNT3 (NM\_001042780) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human troponin T type 3 (skeletal, fast) (TNNT3), transcript variant 3, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC212563 representing NM_001042780 Red=Cloning site Green=Tags(s)

MSDEEVEQVEEQYEEEEEAQEEEEVQEEKPRPKLTAPKIPEGEKVDFFDIQKKRQNKDLMELQALIDSH  
FEARKKEEELVALKERIEKRRRAERAEQQRIRAEKERERQNLAAEEKARREEDAKRRAEDDLKKKKALS  
SMGANYSYLAKADQKRGKKQTAREMKKKILAERRKPLNIDHLGEDKLRDKAKELWETLHQLEIDKFEFG  
EKLKRQKYDIMNVRARVQMLAKFSKKAGTPAKGKVGGRWK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	29.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_001036245</a>
Locus ID:	7140

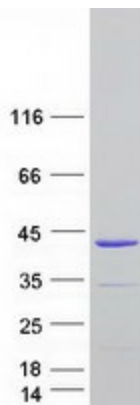


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UniProt ID:	<a href="#">P45378</a>
RefSeq Size:	1193
Cytogenetics:	11p15.5
RefSeq ORF:	750
Synonyms:	beta-TnTF; DA2B2; TNTF

**Summary:** 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 been established. Mutations in this gene may cause distal arthrogyposis multiplex congenita type 2B (DA2B). [provided by RefSeq, Oct 2009]

### Product images:



Coomassie blue staining of purified TNNT3 protein (Cat# TP312563). The protein was produced from HEK293T cells transfected with TNNT3 cDNA clone (Cat# [RC212563]) using MegaTran 2.0 (Cat# [TT210002]).