

Product datasheet for **TP323893L**

TNNT3 (NM_001042782) Human Recombinant Protein

Product data:

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|---------------------------------------|-----------------------------------------------------------------------------------------------------|
| Product Type: | Recombinant Proteins |
| Description: | Recombinant protein of human troponin T type 3 (skeletal, fast) (TNNT3), transcript variant 4, 1 mg |
| Species: | Human |
| Expression Host: | HEK293T |
| Expression cDNA Clone or AA Sequence: | >RC223893 protein sequence Red =Cloning site Green =Tags(s) |

MSDEEVEQVEEQYEEEEEAQEEEEVQEEKPRPKLTAPKIPEGEKVDFFDIQKKRQNKDLMELQALIDSH
FEARKKEEELVALKERIEKRRRAERAEQQRIRAEKERERQNRLAEEKARREEDAKRRAEDDLKKKKALS
SMGANYSYLAKADQKRGKKQTAREMKKKILAERRKPLNIDHLGEDKLRDKAKELWETLHQLEIDKFEFG
EKLKRQKYDITTLRSRIDQAQKHSKAGTPAKGKVGGRWK

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: | NP_001036247 |
| Locus ID: | 7140 |

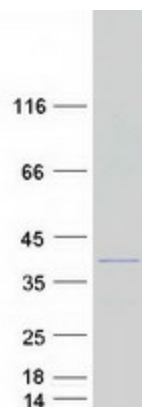


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UniProt ID: [P45378](#)
RefSeq Size: 1193
Cytogenetics: 11p15.5
RefSeq ORF: 750
Synonyms: beta-TnTF; DA2B2; TNTF

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 arthrogyriosis multiplex congenita type 2B (DA2B). [provided by RefSeq, Oct 2009]

Product images:



Coomassie blue staining of purified TNNT3 protein (Cat# [TP323893]). The protein was produced from HEK293T cells transfected with TNNT3 cDNA clone (Cat# [RC223893]) using MegaTran 2.0 (Cat# [TT210002]).