

Product datasheet for PH312563

TNNT3 (NM_001042780) Human Mass Spec Standard

Product data:

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| Product Type: | Mass Spec Standards |
| Description: | TNNT3 MS Standard C13 and N15-labeled recombinant protein (NP_001036245) |
| Species: | Human |
| Expression Host: | HEK293 |
| Expression cDNA Clone or AA Sequence: | RC212563 |
| Predicted MW: | 30.2 kDa |
| Protein Sequence: | >RC212563 representing NM_001042780 Red =Cloning site Green =Tags(s) MSDEEVEQVEEQYEEEEAAQEEEEVQEEKPRPKLTAPKIPEGEKVDFDDIQKKRQNKDLMELQALIDSH FEARKKEEELVALKERIEKRAERAQQRIRAERERQNLAEKARREEEDAKRRAEDDLKKKALS SMGANYSYLAKADQKRGKQTAREMKKKILAERRKPLNIDHLGEDKLRDKAKELWETLHQLEIDKFEFG EKLKRQKYDIMNVRARVQMLAKFSKKAGTPAKGKVGGRWK 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- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-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: | NP_001036245 |
| RefSeq Size: | 1193 |
| RefSeq ORF: | 750 |
| Synonyms: | beta-TnTF; DA2B2; TNTF |
| Locus ID: | 7140 |
| UniProt ID: | P45378 |



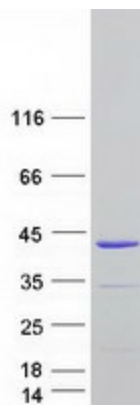
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Cytogenetics: 11p15.5

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 arthrogryposis 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]).