

## **Product datasheet for SC202706**

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OriGene Technologies, Inc.

## TNNT3 (NM\_001042780) Human 3' UTR Clone

**Product data:** 

**Product Type:** 3' UTR Clones

Product Name: TNNT3 (NM\_001042780) Human 3' UTR Clone

**Vector:** pMirTarget (PS100062)

Symbol: TNNT3

**Synonyms:** beta-TnTF; DA2B2; TNTF

**ACCN:** NM\_001042780

**Insert Size:** 240 bp

Insert Sequence: >SC202706 3'UTR clone of NM\_001042780

The sequence shown below is from the reference sequence of NM\_001042780. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

AAGGGCAAAGTCGGCGGCGCTGGAAGTAGAGAGGCCCAGAAAGGCCCCTCGAGGCAGAGACCCTCCGCC CTCTTGCACACCAGGGCCGCTCGTGGGACTCCACATCCTCCAGCCCCCACAATCCTGTCAGGGGCTCCC TGACAGTCCTGGGGGTGGAGAGGCCATCCCGGGGCGTCCCCCGCGTCTGTGTCCTTGCTGCCTTCATCC

CCTGGGGCCTGTGAATAAAGCTGCAGAACCCCC

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).

**Components:** The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

**RefSeq:** <u>NM 001042780.3</u>







**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 actinmyosin 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]

**Locus ID:** 7140

MW: 8.3