

Product datasheet for SC202704

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436

OriGene Technologies, Inc.

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

TNNT3 (NM_001042782) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: TNNT3 (NM_001042782) Human 3' UTR Clone

Vector: pMirTarget (PS100062)

Symbol: TNNT3

Synonyms: beta-TnTF; DA2B2; TNTF

ACCN: NM_001042782

Insert Size: 240 bp

Insert Sequence: >SC202704 3'UTR clone of NM_001042782

The sequence shown below is from the reference sequence of NM_001042782. 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 001042782.3</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