

Product datasheet for SC311460

TNNT3 (NM_001042780) Human Untagged Clone

Product data:

OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	TNNT3 (NM_001042780) Human Untagged Clone
Tag:	Tag Free
Symbol:	TNNT3
Synonyms:	beta-TnTF; DA2B2; TNTF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	<pre>>SC311460 representing NM_001042780. Blue=Insert sequence Red=Cloning site Green=Tag(s)</pre>
	GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGTCTGACGAGGAGAGTTGAACAGGTGGAGGAGCAGTACGAAGAAGAAGAAGAGGAAGCCCAGGAGGAAGAG GAAGTTCAAGAAGAGGAGAAACCGAGACCCAAACTCACTGCTCCTAAGATCCCAGAAGGGGAGAAAGTG GACTTCGATGACATCCAGAAGAAGCGTCAGAACAAAGACCTAATGGAGCTCCAGGCCCTCATCGACAGC CACTTTGAAGCCCGGAAGAAGGAGGAGGAGGAGGAGCTGGTCGCTCTCAAAGAGAGAAACCGAGAAGCGCCGT GCAGAGAGAGCGGAGCAGCAGAGGAGGAGGAGGAGCTGGTCGCTCTCAAAGAGAGAACCGACAGACTGGCGGAG GAAAAGGCCAGAAGGGAGGAGGAGGAGGACGCCGGCCG
Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001042780
Insert Size:	753 bp



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ORIGENE TNNT3 (NM_001042780) Human Untagged Clone – SC311460	
	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
lethod:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
	<u>NM 001042780.2</u>
	1193 bp
	753 bp
	7140
	<u>P45378</u>
	11p15.5
	29.7 kDa
	ethod:

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GRIGENE TNNT3 (NM_001042780) Human Untagged Clone – SC311460

The binding of Ca(2+) to the trimeric troponin complex initiates the process of muscle Gene Summary: 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]

Transcript Variant: This variant (3) lacks two internal coding exons and contains one different coding exon compared to transcript variant 1. However, it maintains the reading frame, and encodes a shorter isoform (3) with a different internal segment compared to isoform 1.

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