

Product datasheet for **SC322919**

Troponin T1 (TNNT1) (NM_001126133) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Troponin T1 (TNNT1) (NM_001126133) Human Untagged Clone
Tag:	Tag Free
Symbol:	TNNT1
Synonyms:	ANM; NEM5; STNT; TNT; TNTS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC322919 representing NM_001126133. Blue=Insert sequence Red=Cloning site Green=Tag(s)

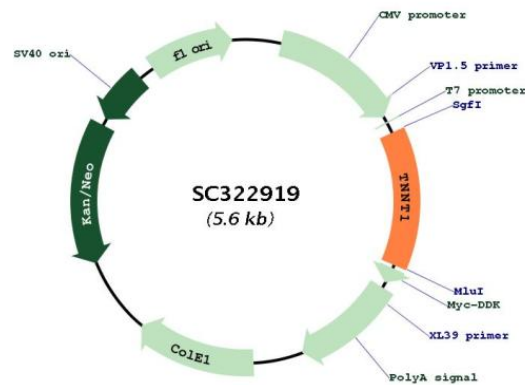
```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGTCGGACACCGAGGAGCAGGAATATGAGGAGGAGCAGCCGGAAGAGGAGGCTGCGGAGGAGGAGGAG
GAAGAAGAGGAACGCCCAAACCAAGCCGCCCGTGGTGCCTCCTTTGATCCCGCCAAAGATCCCAGAA
GGGAGCGCGTTGACTTCGATGACATCCACCGCAAGCGCATGGAGAAAGACCTGCTGGAGCTGCAGACA
CTCATCGATGTACATTTGAGCAGCGGAAGAAGGAGGAAGAGGAGCTGGTTGCCTGAAGGAGCGCATT
GAGCGGCCCGGTCAGAGAGAGCCGAGCAACAGCGCTTCAGAAGTGAAGGAACCGGAACGTCAGGCT
AAGCTGGCGGAGGAGAAGATGAGGAAGGAAGAGGAAGAGGCCAAGAAGCGGGCAGAGGATGATGCCAAG
AAAAAGAAGTGCTGTCCAACATGGGGGCCATTTTGGCGGCTACCTGGTCAAGGCAGAACAAGCGT
GGTAAGCGGCAGACGGGGCGGGAGATGAAGGTGCGCATCCTCTCCGAGCGTAAGAAGCCTCTGGACATT
GACTACATGGGGAGGAACAGCTCCGGGAGAAAGCCAGGAGCTGTCGGACTGGATCCACCAGCTGGAG
TCTGAGAAGTTCGACCTGATGGCGAAGCTGAAACAGCAGAAAATATGAGATCAACGTGCTGTACAACCGC
ATCAGCCACGCCAGAAGTTCGGAAAGGGGCAGGGAAGGGCCGCTTGGAGGCCGCTGGAAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```

Restriction Sites: Sgfl-MluI



[View online »](#)

Plasmid Map:



ACCN: NM_001126133

Insert Size: 756 bp

OTI Disclaimer: 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).

OTI Annotation: 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.

Components: 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).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. 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.

RefSeq: [NM_001126133.2](#)

RefSeq Size: 1178 bp

RefSeq ORF: 756 bp

Locus ID: 7138

UniProt ID: [P13805](#)

Cytogenetics: 19q13.42

Protein Families: Druggable Genome

MW: 30.1 kDa

Gene Summary: This gene encodes a protein that is a subunit of troponin, which is a regulatory complex located on the thin filament of the sarcomere. This complex regulates striated muscle contraction in response to fluctuations in intracellular calcium concentration. This complex is composed of three subunits: troponin C, which binds calcium, troponin T, which binds tropomyosin, and troponin I, which is an inhibitory subunit. This protein is the slow skeletal troponin T subunit. Mutations in this gene cause nemaline myopathy type 5, also known as Amish nemaline myopathy, a neuromuscular disorder characterized by muscle weakness and rod-shaped, or nemaline, inclusions in skeletal muscle fibers which affects infants, resulting in death due to respiratory insufficiency, usually in the second year. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (3) lacks an alternate in-frame exon in the 5' coding region, and uses an alternate in-frame splice site in the 3' coding region, compared to variant 1, resulting in an isoform (c) that is shorter than isoform a. Both variants 3 and 4 encode isoform c.