

Product datasheet for **SC303290**

Troponin T1 (TNNT1) (NM_003283) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Troponin T1 (TNNT1) (NM_003283) Human Untagged Clone
Tag:	Tag Free
Symbol:	Troponin T1
Synonyms:	ANM; NEM5; STNT; TNT; TNTS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC303290 sequence for NM_003283 edited (data generated by NextGen Sequencing)

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ATGTCGGACACCGAGGAGCAGGAATATGAGGAGGAGCAGCCGGAAGAGGAGGCTGCGGAG
GAGGAGGAGGAAGCCCCGAAGAGCCGGAGCCGGTGGCAGAGCCAGAAGAGGAACCCCC
AAACCAAGCCGCCCGTGGTGCCTCCTTTGATCCCGCCAAAGATCCCAGAAGGGGAGCGC
GTTGACTTCGATGACATCCACCGCAAGCGCATGGAGAAAGACCTGCTGGAGCTGCAGACA
CTCATCGATGTACATTTGAGCAGCGGAAGAAGGAGGAAGAGGAGCTGGTTGCCTTGAAG
GAGCGCATTGAGCGGCCCGGTGAGAGAGCCGAGCAACAGCGCTTCAGAACTGAGAAG
GAACGCGAACGTCAGGCTAAGCTGGCGGAGGAGAAGATGAGGAAGGAAGAGGAAGAGGCC
AAGAAGCGGGCAGAGGATGATGCCAAGAAAAAGAAGGTGCTGTCCAACATGGGGGCCAT
TTTGGCGCTACCTGGTCAAGGCAGAACAGAAGCGTGGTAAGCGGCAGACGGGGCGGGAG
ATGAAGGTGCGCATCCTCTCCGAGCGTAAGAAGCCTCTGGACATTGACTACATGGGGGAG
GAACAGCTCCGGGCCCGGTCTGCCTGGCTGCCTCCATCACAGCCCTCCTGCCCTGCCAGG
GAGAAAGCCCAGGAGCTGTGGACTGGATCCACCAGCTGGAGTCTGAGAAGTTTCGACCTG
ATGGCGAAGCTGAAACAGCAGAAATATGAGATCAACGTGCTGTACAACCGCATCAGCCAC
GCCCAGAAGTTCCGGAAGGGGCGAGGAAGGGCCGCTTGAGGGCCGCTGGAAGTGA
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Clone variation with respect to NM_003283.4



[View online »](#)

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_003283 unedited AGGNCGGCCCGCNAATTCGGCCATTACGGCCGGGAGCAAGGCTCAGCCTCAANATTCACAGCATCTCAGACGCAGCCTAGGCCGCACCAGGATGTCGGACACCGAGGAGCAGGAATATGAGGAGGAGCAGCCGGAAGAGGAGGCTGCGGAGGAGGAGGAGGAAGCCCCGAAGAGCCGAGCCGGTGGCAGAGCCAGAAGAGGAACGCCCAAACCAAGCCGCCCGTGGTGCCTCCTTGATCCCGCCAAAGATCCCAGAAGGGGAGCGGTTGACTTCGATGACATCCACCGCAA GCGCATGGAGAAAAGACCTGCTGGAGCTGCAGACACTCATCGATGTACATTCGAGCAGCG GAAGAAGGAGGAAGAGGAGCTGGTTGCCTTGAAGGAGCGCATTGAGCGGCCCGGTCAGAGAGCCGAGCAACAGCGCTTCAGAAGTGAAGGAACGCGAACGTCAGGCTAAGCTGGC GGAGGAGAAGATGAGGAAGGAAGAGGAAGAGGCCAAGAAGCGGGCAGAGGATGATGCCAA GAAAAAGAAGGTGCTGTCCAACATGGGGGCCATTTTGGCGGCTACCTGGTCAAGGCAGAGACAGAAGCGTGGTAAGCGGCAGACGNGCGGGAGATGAAGGTGCGCATCCTCTCCGAGCG TAAGAAGCCTCTGGACATTGACTACTGGNGGGGAGGAACCAGCTCGNCCNGTCTGCCTGGGCTGCCTCCATCACAGCCCTCCTGCCCTGCCNAGGGAGAAAGCCAGGAGCTGTTCGA CTGGNATCACCAGCTGGAGTCTGAAAAGTTCGACCTGATGGGCGAGCTTGAACAGCGAAT TTGAAATCACGTGCTG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_003283 unedited AGNAAAGCACTGGGNGAGGTCACAGGGATGCCACCCGGGCTCTGTTTCAGGAAACAGCTA TGACCGCGGCCGCAATCTAGAGTCGAGGGCCGAGGCGGCCGACATGTTTTTTTTTTTTTT TTTTTTTTTTTTTTTAGCGGGTGTCTGAGGGGAGCGTTTATTTCAAGCTACCGATGGGAC AAACACTCCCAGGCTTCCAGGTGCCACTGTCCGGGGCGGCATCCTCACTCCAGCGGCC TCCAACCGGCCCTTCCCTGCCCTTCCGGAACCTCTGGGCGTGGCTGATGCGGTTGTA CAGCACGTTGATCTCATATTTCTGCTGTTTCAGCTTCGCCATCAGGTCGAACTTCTCAGA CTCCAGCTGGTGGATCCAGTCCGACAGCTCCTGGGCTTCTCCCTGGCAGGGCAGGAGGG CTGTGATGGAGGCAGCCAGGCAGACCGGGCCCGAGCTGTTCCCTCCCCATGTAGTCAAT GTCCAGAGGCTTCTTACGCTCGGAGAGGATGCGCACCTTCATCTCCCGCCCGTCTGCCG CTTACCACGCTTCTGTTCTGCCTTGACCAGGTAGCCGCCAAAATGGGCCCCCATGTTGGA CAGCACCTTTTTTCTTGGCATCATCCTCTGCCCGCTTCTTGGCCTCTCCTCTTCCTT CCTCATCTTCTCCTCCGCCAGCTTAGCCTGACGTTTCGCGTTCCTTCTCAGTTCTGAAGCG CTGTTGCTTCCCTCTCTGACCGGCCCGCTCAATGCGCTCCTTCAAGGGCACCAGCTN CTCTTCCCTTCTCCGCTGCTCGAAAAGTACATCGATGAGTGTCTGCAGCTCCAGCAGG TCTTTCTCCATGCGCTTGCGGTGGTGTATCCAATCAACGCG</p>
Restriction Sites:	Please inquire
ACCN:	NM_003283
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_003283.3](#), [NP_003274.2](#)

RefSeq Size: 980 bp

RefSeq ORF: 837 bp

Locus ID: 7138

UniProt ID: [P13805](#)

Cytogenetics: 19q13.42

Protein Families: Druggable Genome

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 (1) encodes the longest isoform (a).