

## Product datasheet for **RG236933**

### Troponin T1 (TNNT1) (NM\_001291774) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Troponin T1 (TNNT1) (NM_001291774) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Troponin T1
Synonyms:	ANM; NEM5; STNT; TNT; TNTS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236933 representing NM_001291774. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCGGACACCGAGGAGCAGGAATATGAGGAGGAGCAGCCGGAAGAGGAGGCTGCGGAGGAGGAGGAG
GAAGAAGAGGAACGCCCAAACCAAGCCGCCCGTGGTGCCTCCTTTGATCCCGCCAAAGATCCCAGAA
GGGAGCGCGTTGACTTCGATGACATCCACCGCAAGCGCATGGAGAAAGACCTGCTGGAGCTGCAGACA
CTCATCGATGTACATTTGAGCAGCGGAAGAAGGAGGAAGAGGAGCTGGTTGCCTGAAGGAGCGCATT
GAGCGGCCCGGTCAGAGAGAGCCGAGCAACAGCGCTTCAGAAGTGAAGAAGCAACGGAACGTCAGGCT
AAGCTGGCGGAGGAGAAGATGAGGAAGGAAGAGGAAGAGGCCAAGAAGCGGGCAGAGGATGATGCCAAG
AAAAAGAAGTGCTGTCCAACATGGGGGCCATTTTGGCGGCTACCTGGTCAAGGCAGAACAAGCGT
GGTAAGCGGCAGACGGGGCGGGAGATGAAGGTGCGCATCCTCTCCGAGCGTAAGAAGCCTCTGGACATT
GACTACATGGGGGAGGAACAGCTCCGGGAGAAAGCCAGGAGCTGTCGGACTGGATCCACCAGCTGGAG
TCTGAGAAGTTCGACCTGATGGCGAAGCTGAAACAGCAGAAAATGAGATCAACGTGCTGTACAACCGC
ATCAGCCACGCCAGAAGTTCGGAAAGGGGGCAGGGAAGGGCCGCGTTGGAGGCCGCTGGAAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



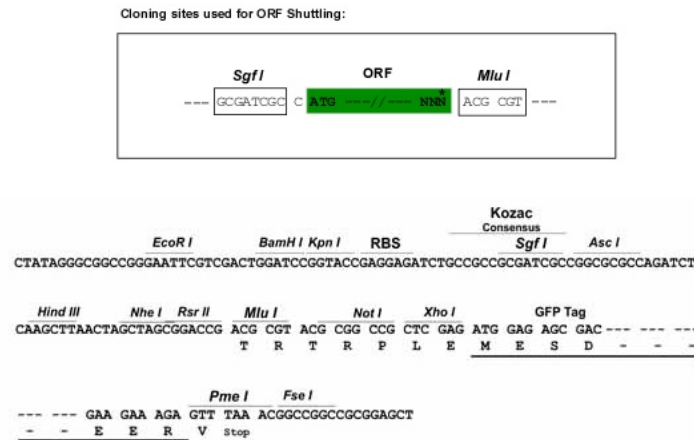
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG236933  
 Blue=ORF Red=Cloning site Green=Tag(s)

MSDTEEQEYEEEPQEEEEAAAAEEEEEEEEERPKPSRPVVPPLIPPKIPEGERVDFDDIHRKRMEKDLLELQT  
 LIDVHFEQRKKEEELVALKERIERRRSERAEQQRFRTEKERERQAKLAEEMRKEEEEEAKKRAEDDAK  
 KKKVL SNMGAHFGGYL VKAEQKRGRQT GREMKVRILSERKKPLDIDYMGEEQLREKAQELSDWIHQLE  
 SEKFDLMAKLKQKYEINVL YNRI SHAQKFRKGAGKGRVGGRWK  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001291774

**ORF Size:** 753 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

**RefSeq:** [NM\\_001291774.2](#)

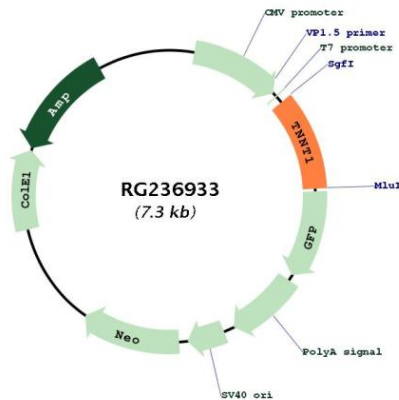
**RefSeq Size:** 1273 bp

**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]

### Product images:



Circular map for RG236933