

## **Product datasheet for SC334827**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 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

## Troponin T1 (TNNT1) (NM\_001291774) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Troponin T1 (TNNT1) (NM\_001291774) Human Untagged Clone

Tag: Tag Free Symbol: TNNT1

Synonyms: ANM; NEM5; STNT; TNT; TNTS

**Vector:** pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001291774, the custom clone sequence may differ by one or

more nucleotides

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM 001291774

**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).

CCCAGAAGTTCCGGAAGGGGCAGGGAAGGGCCGCGTTGGAGGCCGCTGGAAGTGA

**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: <u>NM 001291774.1</u>, <u>NP 001278703.1</u>

 RefSeq Size:
 1273 bp

 RefSeq ORF:
 756 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 (4) differs in the 5' UTR, 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