

## Product datasheet for **SC333246**

### Cardiac Troponin T (TNNT2) (NM\_001276347) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cardiac Troponin T (TNNT2) (NM\_001276347) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cardiac Troponin T  
**Synonyms:** CMD1D; CMH2; CMPD2; cTnT; LVNC6; RCM3; TnTC  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC333246 representing NM\_001276347.  
**Blue**=Insert sequence **Red**=Cloning site **Green**=Tag(s)

```
ATGTCTGACATAGAAGAGGTGGTGAAGAGTACGAGGAGGAGGAGCAGGAAGAAGCAGCTGTTGAAGAG
CAGGAGGAGGCAGCGGAAGAGGATGCTGAAGCAGAGGCTGAGACCGAGGAGACCAGGGCAGAAGAAGAT
GAAGAAGAAGAGGAAGCAAAGGAGGCTGAAGATGGCCCAATGGAGGAGTCCAAACCAAAGCCAGGTCG
TTCATGCCCAACTTGGTGCCTCCCAAGATCCCCGATGGAGAGAGAGTGGACTTTGATGACATCCACCGG
AAGCGCATGGAGAAGGACCTGAATGAGTTGCAGGCGCTGATCGAGGCTCACTTTGAGAACAGGAAGAAA
GAGGAGGAGGAGCTCGTTTCTCTCAAAGACAGGATCGAGAGACGTCGGGCAGAGCGGGCCGAGCAGCAG
CGCATCCGGAATGAGCGGGAGAAGGAGCGGCAGAACCCGCTGGCTGAAGAGAGGGCTCGACGAGAGGAG
GAGGAGAACAGGAGGAAGGCTGAGGATGAGGCCCGGAAGAAGAAGGCTTTGTCCAACATGATGCATTTT
GGGGGTTACATCCAGAAGCAGGCCAGACAGAGCGGAAAAGTGGGAAGAGGCAGACTGAGCGGGAAAAG
AAGAAGAAGATTCTGGCTGAGAGGAGGAAGGTGCTGGCCATTGACCACCTGAATGAAGATCAGCTGAGG
GAGAAGGCCAAGGAGCTGTGGCAGAGCATCTATAACTTGGAGGCAGAGAAGTTCGACCTGCAGGAGAAG
TTCAAGCAGCAGAAATATGAGATCAATGTTCTCCGAAACAGGATCAACGATAACCCAGAAAGTCTCCAAG
ACCCGCGGAAGGCTAAAGTCACCGGGCGCTGGAATAG
```

**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_001276347  
**Insert Size:** 867 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).  
**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).



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**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\\_001276347.1](#)

**RefSeq Size:** 1307 bp

**RefSeq ORF:** 867 bp

**Locus ID:** 7139

**UniProt ID:** [P45379](#)

**Cytogenetics:** 1q32.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

**MW:** 34.6 kDa

**Gene Summary:** The protein encoded by this gene is the tropomyosin-binding subunit of the troponin complex, which is located on the thin filament of striated muscles and regulates muscle contraction in response to alterations in intracellular calcium ion concentration. Mutations in this gene have been associated with familial hypertrophic cardiomyopathy as well as with dilated cardiomyopathy. Transcripts for this gene undergo alternative splicing that results in many tissue-specific isoforms, however, the full-length nature of some of these variants has not yet been determined. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (7) differs in the 5' UTR and lacks an in-frame exon in the 5' coding region compared to variant 5. The resulting protein (isoform 2) is shorter but has the same N- and C-termini compared to isoform 5. Variants 2 and 7 encode the same protein.