

Product datasheet for SC319089

OriGene Technologies, Inc.

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Cardiac Troponin T (TNNT2) (NM_001001431) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cardiac Troponin T (TNNT2) (NM_001001431) Human Untagged Clone

Tag: Tag Free

Symbol: Cardiac Troponin T

Synonyms: CMD1D; CMH2; CMPD2; cTnT; LVNC6; RCM3; TnTC

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001001431.1

CTGAGCAGACGCCTCCAGGATCTGTCGGCAGCTGCTGTTCTGAGGGAGAGCAGAGACCAT GTCTGACATAGAAGAGGTGGTGGAAGAGTACGAGGAGGAGGAGCAGGAAGAAGCAGCTGT TGAAGAGCAGGAGGAGGCAGCGGAAGAGGATGCTGAAGCAGAGGCTGAGACCGAGGAGAC CAGGGCAGAAGAAGAAGAAGAAGAAGAAGCAAAGGAGGCTGAAGATGGCCCAATGGA GGAGTCCAAACCAAAGCCCAGGTCGTTCATGCCCAACTTGGTGCCTCCCAAGATCCCCGA TGGAGAGAGAGTGGACTTTGATGACATCCACCGGAAGCGCATGGAGAAGGACCTGAATGA GTTGCAGGCGCTGATCGAGGCTCACTTTGAGAACAGGAAGAAGAAGAGGAGGAGGAGCTCGT TTCTCTCAAAGACAGGATCGAGAGACGTCGGGCAGAGCGGGCCGAGCAGCAGCGCATCCG GAATGAGCGGGAGAAGGAGCGCCAGAACCGCCTGGCTGAAGAGAGGGCTCGACGAGAGGA GGAGGAGAACAGGAGGAAGGCTGAGGATGAGGCCCGGAAGAAGAAGGCTTTGTCCAACAT GATGCATTTTGGGGGTTACATCCAGAAGACAGAGCGGAAAAGTGGGAAGAGGCAGACTGA GCGGGAAAAGAAGAAGATTCTGGCTGAGAGGAGGAAGGTGCTGGCCATTGACCACCT GAATGAAGATCAGCTGAGGGAGAAGGCCAAGGAGCTGTGGCAGAGCATCTATAACTTGGA GGCAGAGAAGTTCGACCTGCAGGAGAAGTTCAAGCAGCAGAAATATGAGATCAATGTTCT CCGAAACAGGATCAACGATAACCAGAAAGTCTCCAAGACCCGCGGGAAGGCTAAAGTCAC CCTCCGGCCTGCACTCCCCAGTTCCCGGGCCCTCCTGGGCACCCCAGGCAGCTCCTGTT

Restriction Sites: Please inquire

ACCN: NM 001001431





Cardiac Troponin T (TNNT2) (NM_001001431) Human Untagged Clone - SC319089

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: <u>NM 001001431.1</u>, <u>NP 001001431.1</u>

 RefSeq Size:
 1123 bp

 RefSeq ORF:
 858 bp

 Locus ID:
 7139

 UniProt ID:
 P45379

 Cytogenetics:
 1q32.1

Protein Families: Druggable Genome

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

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 (3) lacks multiple in-frame exons, compared to variant 5. It

encodes a shorter isoform (3) compared to isoform 5.