

Product datasheet for RC233563

Cardiac Troponin T (TNNT2) (NM_001276346) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cardiac Troponin T (TNNT2) (NM_001276346) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cardiac Troponin T
Synonyms:	CMD1D; CMH2; CMPD2; cTnT; LVNC6; RCM3; TnTC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC233563 representing NM_001276346 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTGACATAGAAGAGGTGGTGAAGAGTACGAGGAGGAGGAGCAGGAAGAAGCAGCTGTTGAAGAAG
AGGAGGACTGGAGAGAGGACGAAGACGAGCAGGAGGAGGCCAGCGGAAGAGGATGCTGAAGCAGAGGCTGA
GACCGAGGAGACCAGGGCAGAAGATGAAGAAGAAGAGGAAGCAAAGGAGGCTGAAGATGGCCAATGGAG
GAGTCAAACCAAAGCCAGGTCGTTTCATGCCCAACTTGGTGCCTCCCAAGATCCCCGATGGAGAGAGAG
TGGACTTTGATGAGAGACGTCGGGCAGAGCGGGCCGAGCAGCAGCGCATCCGGAATGAGCGGGAGAAGGA
GCGGCAGAACCGCTGGCTGAAGAGAGGGCTCGACGAGAGGAGGAGGAGAACAGGAGGAAGGCTGAGGAT
GAGGCCCGGAAGAAGAAGGCTTTGTCCAACATGATGCATTTTGGGGTTACATCCAGAAGACAGAGCGGA
AAAGTGGGAAGAGGCAGACTGAGCGGGAAGAAGAAGATTCTGGCTGAGAGGAGGAAGGTGCTGGC
CATTGACCACCTGAATGAAGATCAGCTGAGGGAGAAGGCCAAGGAGCTGTGGCAGAGCATCTATAACTTG
GAGGCAGAGAAGTTCACCTGCAGGAGAAGTTCAAGCAGCAGAAATATGAGATCAATGTTCTCCGAAACA
GGATCAACGATAACCAGAAAGTCTCCAAGACCCGCGGAAGGCTAAAGTCACCGGGCGCTGGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC233563 representing NM_001276346
Red=Cloning site Green=Tags(s)

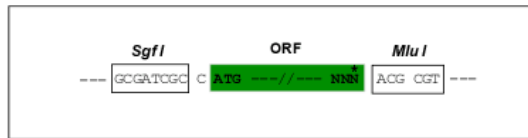
MSDIEEVVEEYEEEEQEEAAVEEEEDWREDEDEQEEAAEEDAEAEAEETEETRADEEEEEAKEAEDGPME
 ESKPKPRSFMPNLPVPPKIPDGERVDFDERRRAERAEQQRIRNEREKERQNRLAEEERARREEEENRRKAED
 EARKKKALSNMMHFGGYIQKTERKSGKRQTEREKKKKILAERRKVLAIIDLHNLQDLREKAKELWQSIYNL
 EAEKFDLQEKFKQKYEINVLNRINDNQKVSKTRGKAKVTGRWK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001276346

ORF Size: 765 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).

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_001276346.2](#)

RefSeq Size: 1075 bp

RefSeq ORF: 768 bp

Locus ID: 7139

UniProt ID: [P45379](#)

Cytogenetics: 1q32.1

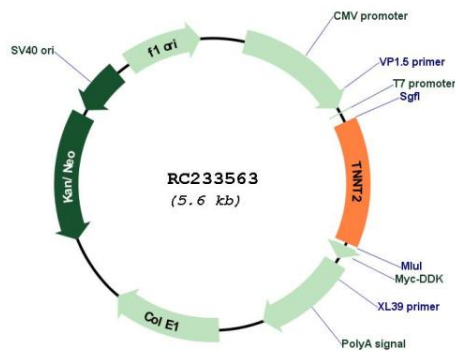
Protein Families: Druggable Genome

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

MW: 31.1 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]

Product images:



Circular map for RC233563