

## Product datasheet for RC202754

### Troponin C (TNNC2) (NM\_003279) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Troponin C (TNNC2) (NM\_003279) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Troponin C  
**Synonyms:** CFAP85; FAP85  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC202754 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGACGGACCAGCAGGCTGAGGCCAGGTCCTACCTCAGCGAAGAGATGATCGCTGAGTTC AAGGCTGCCT  
 TTGACATGTTTGATGCTGATGGTGGTGGGGACATCAGCGTCAAGGAGTTGGGCACGGTGTGAGGATGCT  
 GGGCCAGACACCCACCAAGGAGGAGCTGGACGCCATCATCGAGGAGGTGGATGAGGACGGCAGCGGCACC  
 ATCGACTTCGAGGAGTTCTTGGTCATGATGGTGCGCCAGATGAAAGAGGACGCGAAAGGGGAGAGCGAGG  
 AGGAGCTGGCCGAGTGCTCCGCATCTTCGACAGGAATGCAGACGGCTACATCGACCCGGAGGAGCTGGC  
 TGAGATTTTCAGGGCCTCCGGGGAGCACGTGACTGACGAGGAGATCGAATCTCTGATGAAAGACGGCGAC  
 AAGAACAACGACGGCCGATTGACTTCGACGAGTTCCTGAAGATGATGGAGGGCGTGCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202754 protein sequence  
 Red=Cloning site Green=Tags(s)

MTDQQAEARSYLSEEMIAEFKAAFDMFDADGGDISVKELGTVMRMLGQTPKEELDAIIIEVDEDGSGT  
 IDFEFLVMMVRQMKEDAKGKSEELAEFCFRIFDRNADGYIDPEELAEIFRASGEHVTDEEIESLMKDG  
 KNNDGRIDFDEFKMMEGVQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

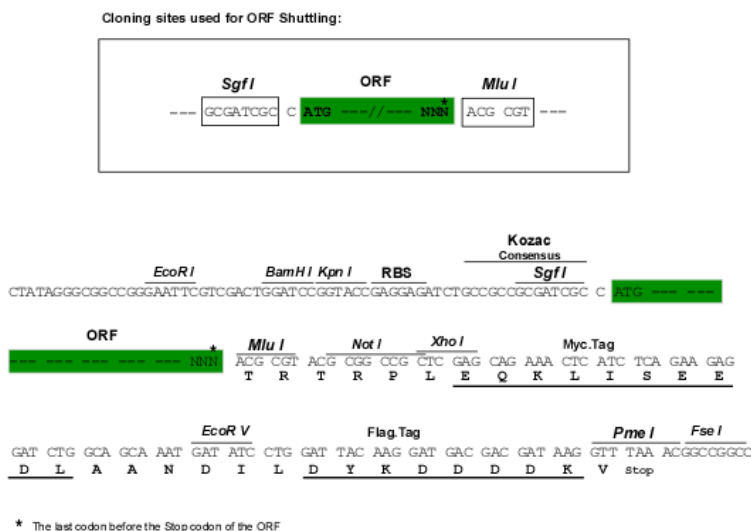
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6145\\_a02.zip](https://cdn.origene.com/chromatograms/mk6145_a02.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003279

**ORF Size:** 480 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_003279.1](#)

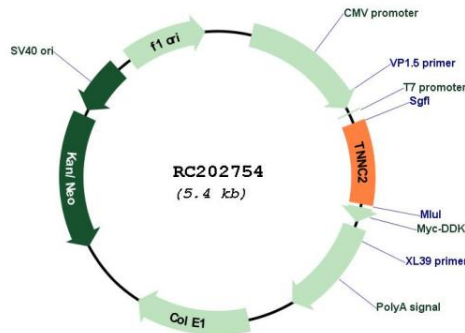
**RefSeq Size:** 698 bp

**RefSeq ORF:** 483 bp

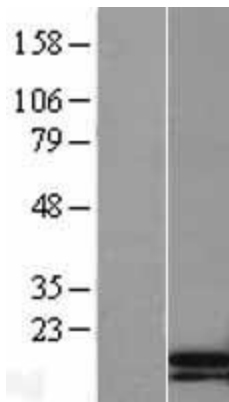
**Locus ID:** 7125  
**UniProt ID:** [P02585](#)  
**Cytogenetics:** 20q13.12  
**Domains:** EFh  
**Protein Pathways:** Calcium signaling pathway  
**MW:** 18.1 kDa

**Gene Summary:** Troponin (Tn), a key protein complex in the regulation of striated muscle contraction, is composed of 3 subunits. The Tn-I subunit inhibits actomyosin ATPase, the Tn-T subunit binds tropomyosin and Tn-C, while the Tn-C subunit binds calcium and overcomes the inhibitory action of the troponin complex on actin filaments. The protein encoded by this gene is the Tn-C subunit. [provided by RefSeq, Jul 2008]

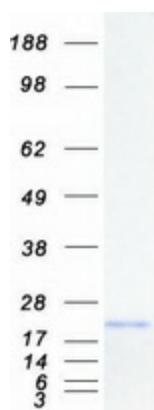
### Product images:



Circular map for RC202754



Western blot validation of overexpression lysate (Cat# [LY401130]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202754 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TNNC2 protein (Cat# [TP302754]). The protein was produced from HEK293T cells transfected with TNNC2 cDNA clone (Cat# RC202754) using MegaTran 2.0 (Cat# [TT210002]).