

## Product datasheet for **SC326535**

### Troponin I fast skeletal muscle (TNNI2) (NM\_001145841) Human Untagged Clone

#### Product data:

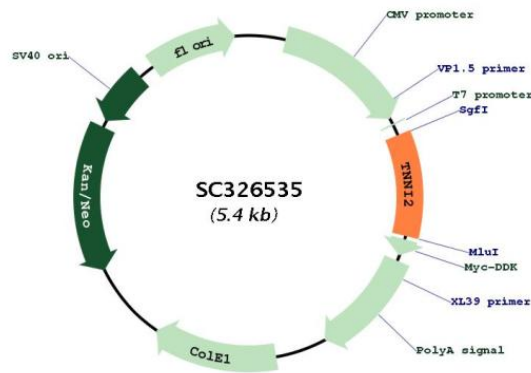
Product Type:	Expression Plasmids
Product Name:	Troponin I fast skeletal muscle (TNNI2) (NM_001145841) Human Untagged Clone
Tag:	Tag Free
Symbol:	TNNI2
Synonyms:	AMCD2B; DA2B; DA2B1; FSSV; fsTnl
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC326535 representing NM_001145841. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCCCAGTGCAAGAAGCGGAACAGGGCCATCACGGCCCGCAGGCAGCACCTGAAGAGTGTGATGCTG
CAGATAGCGGCCACGGAGCTGGAGAAGGAGGAGCCGCCGTGAGGCAGAGAAGCAGAACTACCTGGCG
GAGCACTGCCCGCGCTGCATATCCCGGGCTCCATGTCTGAAGTGCAGGAGCTCTGCAAACAGCTGCAC
GCCAAGATCGATGCGGCTGAAGAGGAGAAGTACGACATGGAGGTGAGGGTGCAGAAGACCAGCAAGGAG
CTGGAGGACATGAACCAGAAGCTATTTGATCTGCGGGCAAGTCAAGCGCCCCACTGCGGAGGGTG
CGCATGTCGGCCGATGCCATGCTCAAGGCCCTGCTGGGCTCGAAGCACAAGGTGTGCATGGACCTGAGG
GCCAACCTGAAGCAGGTCAAGAAGGAGGACACAGAGAAGGAGCGGGACCTGCGAGACGTGGGTGACTGG
AGGAAGAACATCGAGGAGAAGTCTGGCATGGAGGGCCGGAAGAAGATGTTTGAGTCCGAGTCCTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCC
```

Restriction Sites: Sgfl-Mlul



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**Plasmid Map:**


**ACCN:** NM\_001145841

**Insert Size:** 549 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).

**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:** [NM\\_001145841.1](#)

**RefSeq Size:** 707 bp

**RefSeq ORF:** 549 bp

**Locus ID:** 7136

**UniProt ID:** [P48788](#)

**Cytogenetics:** 11p15.5

**MW:** 21.4 kDa

**Gene Summary:** This gene encodes a fast-twitch skeletal muscle protein, a member of the troponin I gene family, and a component of the troponin complex including troponin T, troponin C and troponin I subunits. The troponin complex, along with tropomyosin, is responsible for the calcium-dependent regulation of striated muscle contraction. Mouse studies show that this component is also present in vascular smooth muscle and may play a role in regulation of smooth muscle function. In addition to muscle tissues, this protein is found in corneal epithelium, cartilage where it is an inhibitor of angiogenesis to inhibit tumor growth and metastasis, and mammary gland where it functions as a co-activator of estrogen receptor-related receptor alpha. This protein also suppresses tumor growth in human ovarian carcinoma. Mutations in this gene cause myopathy and distal arthrogryposis type 2B. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2009]

Transcript Variant: This variant (3) lacks a few of 5' exons, but has an alternate 5' exon, as compared to variant 1. The resulting isoform (2) is the same size but has a different N-terminus, as compared to isoform 1.