

Product datasheet for SC324445

TNNI1 (NM 003281) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TNNI1 (NM_003281) Human Untagged Clone

Tag: Tag Free Symbol: TNNI1

Synonyms: SSTNI; TNN1 **Mammalian Cell**

Selection:

Neomycin

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

Fully Sequenced ORF: >OriGene sequence for NM_003281.3

> GGGGACAGTCTGCAGTCTACGGCGAGGCACAGGCCAGCCCAGCTCCACGAGGACTGAACA AGGTGCTGTCTCACTGCCACCATGCCGGAAGTCGAGAGAAAACCCAAGATCACTGCCTCC CGCAAACTCTTGCTGAAGAGCCTGATGCTGGCCAAGGCCAAGGAATGCTGGGAGCAGGAG CACGAGGAGCGCGAGGCTGAGAAGGTGCGCTACCTGGCAGAGCGCATCCCCACGCTGCAG ACCCGTGGCCTGTCCCTCAGTGCCCTGCAGGACCTGTGCCGGGAGCTGCACGCCAAGGTG GAGGTGGTGGATGAGGAGCGATACGACATTGAGGCCAAATGCCTCCACAACACCAGGGAG CGTCGAGTCCGTGTCTCGGCTGACGCCATGCTCCGGGCCCTGCTGGGCTCCAAGCACAAG CGGCCTGTGGAGGTGGCTGACTGGAGGAAGAACGTGGAGGCCATGTCTGGCATGGAAGGC CGGAAGAAGATGTTTGATGCCGCCAAGTCTCCGACCTCACAATAGAGGCCAGCTTGCTGT CTGTGTCTGGAGCATCCCTTCCCACCTCTCCCCCACTTCTTCCCTCCAGCCTGCATGCCC TCCTCTGGAACTGGGATTAAACAGATACCCAAGAGGCAGGAAAAACGCGAGTGTCTGAAG ACCTCACCCTGGCAGGGTGGGCTTCTATCCACCCATGAGGCACCTGGGGCTTCTCAGCCA CCCCGTGGTGTAACAAGTGGAGGAGGAGGAGGGGGGTGAGAACACCTTTCCTCCAGCCCTG TGCCACACTCCTTCTATGTGTGTACAGTGTCCACAGGCATCACACCTTCTTCATTAAAAA

Restriction Sites: Please inquire ACCN: NM 003281



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TNNI1 (NM_003281) Human Untagged Clone - SC324445

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 003281.3, NP 003272.3</u>

Troponin

RefSeq Size: 6162 bp
RefSeq ORF: 564 bp
Locus ID: 7135
UniProt ID: P19237

Cytogenetics: 1q32.1

Domains:

Gene Summary: Troponin proteins associate with tropomyosin and regulate the calcium sensitivity of the

myofibril contractile apparatus of striated muscles. Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. The TnI-fast and TnI-slow genes are expressed in fast-twitch and slow-twitch skeletal muscle fibers, respectively, while the TnI-cardiac gene is expressed exclusively in cardiac muscle tissue. This gene encodes the Troponin-I-skeletal-slow-twitch protein. This gene is expressed in cardiac and skeletal muscle during early development but is restricted to slow-twitch skeletal muscle fibers in adults. The encoded protein prevents muscle contraction by inhibiting calcium-mediated conformational

changes in actin-myosin complexes. [provided by RefSeq, Jul 2008]