

Product datasheet for **SC118103**

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:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118103 sequence for NM_003281 edited (data generated by NextGen Sequencing)

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ATGCCGGAAGTCGAGAGAAAACCCAAGATCACTGCCTCCCCAAACCTCTTGCTGAAGAGC
CTGATGCTGGCCAAGGCCAAGGAATGCTGGGAGCAGGAGCACGAGGAGCGGAGGCTGAG
AAGGTGCGCTACCTGGCAGAGCGCATCCCCACGCTGCAGACCCGTGGCCTGTCCCTCAGT
GCCCTGCAGGACCTGTGCCGGGAGCTGCACGCCAAGGTGGAGGTGGATGAGGAGCGA
TACGACATTGAGGCCAAATGCCTCCACAACACCAGGGAGATTAAGGACCTGAAGCTGAAG
GTGATGGACCTCCGTGGGAAGTTCAAGCGCCCGCCCTGCGTCGAGTCCGTGTCTCGGCT
GACGCCATGCTCCGGGCCCTGCTGGGCTCCAAGCACAAAGGTGCCATGGATCTGCGGGCC
AACCTCAAGTCTGTGAAGAAGGAAGACACAGAGAAGGAGCGGCCTGTGGAGGTGGGTGAC
TGGAGGAAGAACGTGGAGGCCATGTCTGGCATGGAAGGCCGGAAGAAGATGTTTATGCC
GCCAAGTCTCCGACCTACAATAG
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Clone variation with respect to NM_003281.3



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_003281 unedited</p> <pre>GTTTCGAGATTTTGTAAATACGATTTCACTATAGGGCGGNCAGCGAATTCGGACGAGGCTAC GGCGAGGCACAGGCCAGCCCAGCTCCACGAGGACTGAACAGGTGCTGTCTCACTGCCACC ATGCCGGAAGTCGAGAGAAAACCAAGATCACTGCCTCCCGAAACTCTTGCTGAAGAGC CTGATGCTGGCCAAGGCCAAGGAATGCTGGGAGCAGGAGCACGAGGAGCGCGAGGCTGAG AAGGTGCGCTACCTGGCAGAGCGCATCCCCACGCTGCAGACCCGTGGCCTGTCCCTCAGT GCCCTGCAGGACCTGTGCCGGGAGCTGCACGCCAAGGTGGAGGTGGTGGATGATGAGCGA TACGACATTGAGGCCAAATGCCTCCACAACACCAGGGAGATCAAGGACCTGAAGCTGAAG GTGATGGACCTCCGTGGGAAGTTCAAGCGCCCGCCCCCTGCGTAGAGTCCGTGTCTCGGC TGACCCCATGCTACGGGCCCTGTGGGCTCCAAGCACAAGGTGTCCATGGATCTGCCGGC CAACCCTCAGCCTGTGAAGAAGGAATACACAGACAACGACCGGCCTGTGGACGCGGGTT GACTGGAAGAAGAACGTGGATGCCCATGTCTGGCCTGGAAGGCCGGAACAAGACGTTTGA TGCCCGCAACTCCTCGACCTCCAATAAAAGGCCATCTTGCCGTGCTGCGCCTCAGAGC TCCTAGCTTATTGCTTTTTCTACAACCCAAATTAATCACACTTTCTTGACTGGTGGTGGT AGCCTTCCCTCCACCTATCCCCCTTTCTTCCCTTCCACCCGCTTGCCCTTCTTCTGGA CAGGTGAATAAACATTCCCCCTTGAGCCCGACAACCCCGAGGGCCGCTCCACTCTCCCTT GTTGGGCGGGCCTTATTCATCCCTCACGC</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_003281 unedited</p> <pre>ACGCACTCGAGAGTCGAGTTTTTCTTTTTTTTTTTTACCAGAAGTGGGTTTTTAATGAA GAAGGTGTGATGCCTGTGGACACTGTACACACATAGAAGGAGTGTGGCACAGGGCTGGAG GAAAGGTGTTCTACCCCTCCTCCTCCACTTGTTACACCACGGGGTGGCTGAGAAG CCCCAGGTGCCTCATGGGTGGATAGAAGCCACCCTGCCAGGGTGAGGTCTTCAGACACT CGCGTTTTTCTCCTCCTTGGGTATCTGTTAATCCAGTTCAGAGGAGGGCATGCAGG CTGGAGGGAAGAAGTGGGGGAGAGGTGGGAAGGGATGCTCCAGACACAGGCAGAGAGGTG AGTGAGCTGGGTTGGAGAAGAAGCATGAAGCAGGAGCTCAGAGCGCAGCACAGCAAGCTG GCCTCTATTGTGAGGTGCGGAGACTTGGCGGCATCAAACATCTTCTTCCGGCCTTCCATGC CAGACATGGCCTCCACGTTCTTCTCCAGTCACCCACCTCCACAGGCCGCTCCTTCTCTG TGTCTTCTTCTTACAGACTTGAGGTTGGCCCGCAGATCCATGGACACCCTGTGCTTGG AGCCCAGCAAGGCCCGGAGCATGGCGTCAGCCGAGACCCGGACTCGACGCAAGCGCGGGC CGCTTGAACCTCCACGGAGGTCACTACCTCACTTAAAGTCCTTAATCTCCTTGTGTTGT GGAGGCATTTGCCCAAATGTCGATTGCTCCTTATCCACCACCTCACTTGCCTGTCAGCTC CCGGCCAGTCTGCCGGGCCCTGAGAGAAAGCCCCGTTCTGCACGGGGGATCCCTCTGC CAGGAAGGCACCTTTAACCTGCGCTCCTGGCTCCGCTCCAAAATCTTGGCCTGCCAAAT AAGCTCTTAAAGAGTTGGCGGAGCAGGATTTGGGTTTTTCTCATCCGCTGGGGCCGGAA CGCCCTGTCATCT</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_003281
Insert Size:	1110 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).
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_003281.3](#), [NP_003272.3](#)

RefSeq Size: 6162 bp

RefSeq ORF: 564 bp

Locus ID: 7135

UniProt ID: [P19237](#)

Cytogenetics: 1q32.1

Domains: Troponin

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]