

Product datasheet for **SC319499**

TPM1 (NM_000366) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: TPM1 (NM_000366) Human Untagged Clone
Tag: Tag Free
Symbol: TPM1
Synonyms: C15orf13; CMD1Y; CMH3; HEL-S-265; HTM-alpha; LVNC9; TMSA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000366.5
GAGGAATGCGGTGCCCCCTTGGGAAAGTACATATCTGGGAGAAGCAGGCGGCTCCGCGC
TCGCACTCCCGCTCCTCCGCCGACCGCGCTCGCCCCGCGCTCCTGCTGCAGCCCCA
GGGCCCTCGCCCGCCACCATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTC
GACAAGGAGAACGCCTTGATCGAGCTGAGCAGGCGGAGCCGACAAGAAGGCGCGGAA
GACAGGAGCAAGCAGCTGGAAGATGAGTGGTGTCACTGCAAAAGAACTCAAGGCACC
GAAGATGAACTGGACAAATATTCTGAGGCTCTCAAAGTGCCAGGAGAAGCTGGAGCTG
GCAGAGAAAAAGGCCACCGATGCTGAAGCCGACGTAGCTTCTCTGAACAGACGCATCCAG
CTGGTTGAGGAAGAGTTGGATCGTCCAGGAGCGTCTGGCAACAGCTTTCAGAAAGCTG
GAGGAAGCTGAGAAGGCAGCAGATGAGAGTGAGAGAGGCATGAAAGTCATTGAGAGTCGA
GCCAAAAAGATGAAGAAAAATGGAAATTCAGGAGATCCAAGTAAAGAGGCAAAGCAC
ATTGCTGAAGATGCCGACCGCAAATATGAAGAGGTGGCCGTAAGCTGGTCATCATTGAG
AGCGACCTGGAACGTGCAGAGGAGCGGGCTGAGCTCTCAGAAGGCCAAGTCCGACAGCTG
GAAGAACAATTAAGAATAATGGATCAGACCTTGAAGCATTAAATGGCTGCAGAGGATAAG
TACTCGCAGAAGGAAGACAGATATGAGGAAGAGATCAAGGTCCTTCCGACAAGCTGAAG
GAGGCTGAGACTCGGGCTGAGTTTGGGAGAGGTCAGTAACTAAATGGAGAAAAGCATT
GATGACTTAGAAGACGAGCTGTACGCTCAGAACTGAAGTACAAAGCCATCAGCGAGGAG
CTGGACCACGCTCTCAACGATATGACTTCCATGTAACGTTTCCACTCTGCCTGCTTA
CACCTGCCCTCATGCTAATATAAGTTTCTTTGCTTCACTTCTCCAAGACTCCCTCGTC
GAGCTGGATGTCCACCTCTCTGAGCTCTGCATTGTCTATTCTCCAGCTGACCCTGGTT
CTCTCTTAGCATCCTGCCTTAGAGCCAGGCACACACTGTGCTTCTATTGTACAGAAG
CTTCTGTTTCAGTGCAATAAACACTGTGTAAGCTAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire
ACCN: NM_000366



[View online »](#)

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:	<ol style="list-style-type: none">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_000366.5 , NP_000357.3
RefSeq Size:	1294 bp
RefSeq ORF:	855 bp
Locus ID:	7168
UniProt ID:	P09493
Cytogenetics:	15q22.2
Domains:	Tropomyosin
Protein Families:	Druggable Genome
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

Gene Summary:

This gene is a member of the tropomyosin family of highly conserved, widely distributed actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosin is composed of two alpha-helical chains arranged as a coiled-coil. It is polymerized end to end along the two grooves of actin filaments and provides stability to the filaments. The encoded protein is one type of alpha helical chain that forms the predominant tropomyosin of striated muscle, where it also functions in association with the troponin complex to regulate the calcium-dependent interaction of actin and myosin during muscle contraction. In smooth muscle and non-muscle cells, alternatively spliced transcript variants encoding a range of isoforms have been described. Mutations in this gene are associated with type 3 familial hypertrophic cardiomyopathy. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (Tpm1.5, also known as variant 5) contains an alternate, in-frame exon and uses an alternate in-frame splice site and upstream stop codon, compared to variant Tpm1.1. It encodes isoform Tpm1.5cy, which has a different C-terminus, compared to isoform Tpm1.1st.