

Product datasheet for **RC219543**

TPM1 (NM_001018004) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TPM1 (NM_001018004) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TPM1
Synonyms:	C15orf13; CMD1Y; CMH3; HEL-S-265; HTM-alpha; LVNC9; TMSA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219543 representing NM_001018004 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTCGACAAGGAGAACGCCTTGGATCGAGCTGAGC
AGGCGGAGGCCGACAAGAAGGCCGCGGAAGACAGGAGCAAGCAGCTGGAAGATGAGCTGGTGTCACTGCA
AAAGAACTCAAGGCCACCGAAGATGAACTGGACAAATACTCTGAGGCTCTCAAAGATGCCAGGAGAAG
CTGGAGCTGGCAGAGAAAAGGCCACCGATGCTGAAGCCGACGTAGCTTCTCTGAACAGACGCATCCAGC
TGTTGAGGAAGAGTTGGATCGTGCCAGGAGCGTCTGGCAACAGCTTTCGAGAAGCTGGAGGAAGCTGA
GAAGGCAGCAGATGAGAGTGAGAGAGGCATGAAAGTCATTGAGAGTCGAGCCAAAAAGATGAAGAAAA
ATGGAATTCAGGAGATCCAAGTAAAGAGGCCAAGCACATTGCTGAAGATGCCGACCGCAATATGAAG
AGGTGGCCGTAAGCTGGTCATCATTGAGAGCGACCTGGAACGTGCAGAGGAGCGGGCTGAGCTCTCAGA
AGGCAATGTGCCGAGCTTGAAGAAGAATTGAAAAGTGTGACGAACAACCTGAAGTCACTGGAGGCTCAG
GCTGAGAAGTACTCGCAGAAGGAAGACAGATATGAGGAAGAGATCAAGGTCCTTCCGACAAGCTGAAGG
AGGCTGAGACTCGGGCTGAGTTTGGGAGAGGTCAGTAACTAAATGGAGAAAAGCATTGATGACTTAGA
AGAGAAAGTGGCTCATGCCAAAGAAGAAAACCTTAGTATGCATCAGATGCTGGATCAGACTTTACTGGAG
TTAAACAACATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219543 representing NM_001018004
Red=Cloning site Green=Tags(s)

MDAIIKKMQMLKLDKENALDRAEQAEADKKAEDRSKQLEDELVSLQKCLKGTEDELDKYSEALKDAQEK
 LELAEEKATDAEADVASLNRRIQLVEEELDRAQERLATALQKLEEAKEADESERGMKVIESRAQKDEEK
 MEIQEIQLKEAKHIAEDADRKYEEVARKLVIIIESDLERAEEAELSEGKCAELEELKTVTNLKSLEAQ
 AEKYSQKEDRYEEEEIKVLSDKLKEAETRAEFAERSVTKLEKSIDDLEEKVAHAKEENLSMHQMLDQTLLE
 LNNM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6085_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001018004

ORF Size: 852 bp

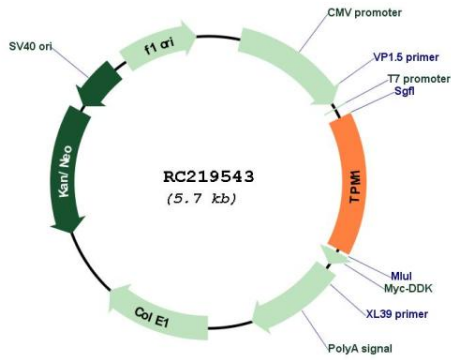
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

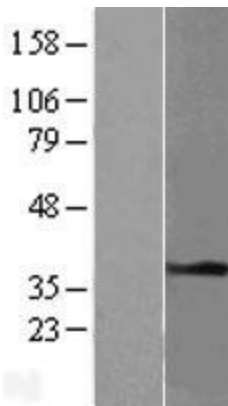
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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_001018004.2
RefSeq Size:	1797 bp
RefSeq ORF:	855 bp
Locus ID:	7168
UniProt ID:	P09493
Cytogenetics:	15q22.2
Protein Families:	Druggable Genome
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)
MW:	32.6 kDa
Gene Summary:	<p>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]</p>

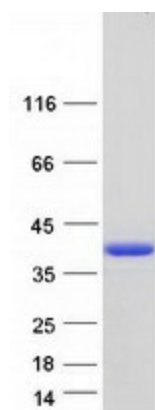
Product images:



Circular map for RC219543



Western blot validation of overexpression lysate (Cat# [LY422690]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC219652] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TPM1 protein (Cat# [TP319543]). The protein was produced from HEK293T cells transfected with TPM1 cDNA clone (Cat# RC219543) using MegaTran 2.0 (Cat# [TT210002]).