

## Product datasheet for **RC218007**

### TPM1 (NM\_001018005) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TPM1 (NM_001018005) 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:	>RC218007 representing NM_001018005 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTCGACAAGGAGAACGCCTTGGATCGAGCTGAGC  
AGGCGGAGGCCGACAAGAAGGCCGCGGAAGACAGGAGCAAGCAGCTGGAAGATGAGCTGGTGTCACTGCA  
AAAGAACTCAAGGCCACCGAAGATGAACTGGACAAATACTCTGAGGCTCTCAAAGATGCCAGGAGAAG  
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TGTTGAGGAAGAGTTGGATCGTGCCAGGAGCGTCTGGCAACAGCTTTCAGAAAGCTGGAGGAAGCTGA  
GAAGGCAGCAGATGAGAGTGAGAGAGGCATGAAAGTCATTGAGAGTCGAGCCAAAAAGATGAAGAAAA  
ATGAAATTCAGGAGATCCAAGTAAAGAGGCCAAGCACATTGCTGAAGATGCCGACCGCAAATATGAAG  
AGGTGGCCGTAAGCTGGTCATCATTGAGAGCGACCTGGAACGTGCAGAGGAGCGGGCTGAGCTCTCAGA  
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AGACGAGCTGTACGCTCAGAACTGAAGTACAAAGCCATCAGCGAGGAGCTGGACCACGCTCTCAACGAT  
ATGACTTCATA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:** >RC218007 representing NM\_001018005  
 Red=Cloning site Green=Tags(s)

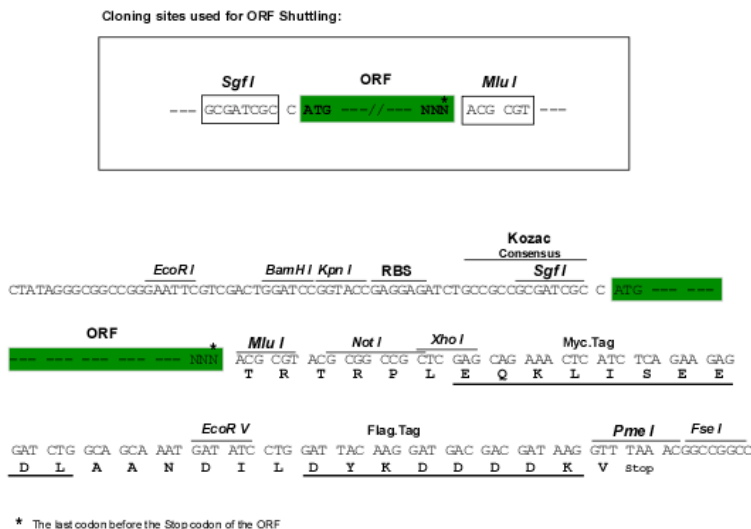
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 MEIQEIQKKEAKHIAEDADRKYEEVARKLVIIIESDLERAEEAELSEGKCAELEELKTVTNLKSLEAQ  
 AEKYSQKEDRYEEEEIKVLSDKLKEAETRAEFAERSVTKLEKSIDDELELYAQKLYKAI SEELDHALND  
 MTSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6085\\_e11.zip](https://cdn.origene.com/chromatograms/mk6085_e11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001018005

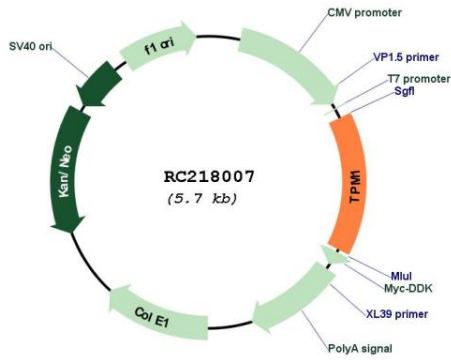
**ORF Size:** 852 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

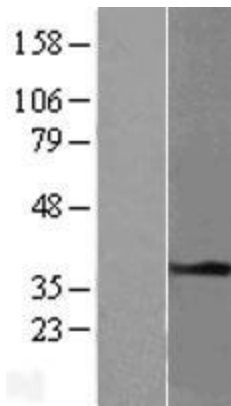
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001018005.2</a>
<b>RefSeq Size:</b>	1246 bp
<b>RefSeq ORF:</b>	855 bp
<b>Locus ID:</b>	7168
<b>UniProt ID:</b>	<a href="#">P09493</a>
<b>Cytogenetics:</b>	15q22.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)
<b>MW:</b>	32.5 kDa
<b>Gene Summary:</b>	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]

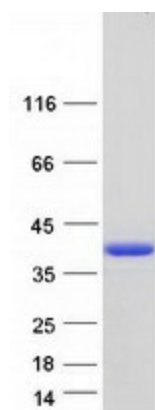
Product images:



Circular map for RC218007



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# [TP318007]). The protein was produced from HEK293T cells transfected with TPM1 cDNA clone (Cat# RC218007) using MegaTran 2.0 (Cat# [TT210002]).