

## Product datasheet for **RC236913**

### TPM1 (NM\_001301289) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** TPM1 (NM\_001301289) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** TPM1  
**Synonyms:** C15orf13; CMD1Y; CMH3; HEL-S-265; HTM-alpha; LVNC9; TMSA  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC236913 representing NM\_001301289  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCGGGGAGTAGCTCGCTGGAGGCGGTGCGCAGGAAGATCCGGAGCCTGCAGGAGCAGGCGGACGCCG  
CTGAGGAGCGCGGGCACCCCTGCAGCGCGAGCTGGACCAGGAGGAAGCTGAGGGAGACCGCTGAAGC  
CGACGTAGCTTCTCTGAACAGACGCATCCAGCTGGTTGAGGAAGAGTTGGATCGTCCCAGGAGCGTCTG  
GCAACAGCTTTCGAGAAGCTGGAGGAAGCTGAGAAGGCAGCAGATGAGAGTGAGAGAGGCATGAAAGTCA  
TTGAGAGTCGAGCCAAAAAGATGAAGAAAAATGGAAATTCAGGAGATCCAACCTGAAAGAGGCCAAGCA  
CATTGCTGAAGATGCCGACCGCAAATATGAAGAGGTGGCCGTAAGCTGGTCATCATTGAGAGCGACCTG  
GAACGTGCAGAGGAGCGGGCTGAGCTCTCAGAAGGCAAATGTGCCGAGCTTGAAGAAGAATTGAAAACCTG  
TGACGAACAACCTGAAGTCACTGGAGGCTCAGGCTGAGAAGTACTCGCAGAAGGAAGACAGATATGAGGA  
AGAGATCAAGTCTTTCCGACAAGCTGAAGGAGGCTGAGACTCGGGCTGAGTTTGGCGAGAGGTGAGTA  
ACTAAATTGGAGAAAAGCATTGATGACTTAGAAGAGAAAAGTGGCTCATGCCAAAGAAGAAAACCTTAGTA  
TGATCAGATGCTGGATCAGACTTTACTGGAGTTAAACAACATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC236913 representing NM\_001301289  
Red=Cloning site Green=Tags(s)

MAGSSSLEAVRRKIRSLQEADAAEERAGTLQRELDHERKLR<sup>+</sup>ETAEADVASLNRRIQLVEEELDRAQERL  
 ATALQKLEEAKEAADESERGMKVIESRAQKDEEKMEIQEIQKLEAKHIAEDADRKYEEVARKLVIIESDL  
 ERAEERAELSEGKCALEEEELKTVTNNLKSLEAQAEKYSQKEDRYEEIKVLSDKLKEAETRAEFAERSV  
 TKLEKSIDDL<sup>+</sup>EELVAHAKEENLSMHQMLDQTLLELNNM

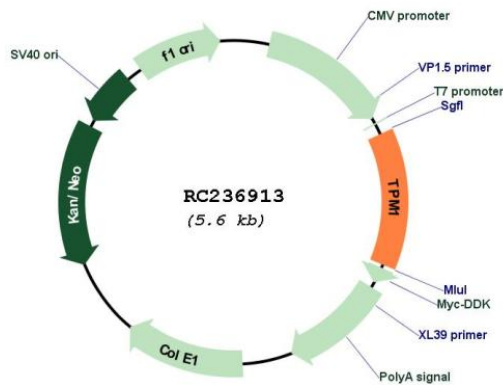
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001301289  
**ORF Size:** 744 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_001301289.2</a>
<b>RefSeq Size:</b>	1629 bp
<b>RefSeq ORF:</b>	747 bp
<b>Locus ID:</b>	7168
<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>	29.1 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]