

## Product datasheet for **RG236913**

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

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | TPM1 (NM_001301289) Human Tagged ORF Clone                                     |
| Tag:                      | TurboGFP   |
| Symbol:                   | TPM1   |
| Synonyms:                 | C15orf13; CMD1Y; CMH3; HEL-S-265; HTM-alpha; LVNC9; TMSA                       |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:        | Ampicillin (100 ug/mL)   |
| ORF Nucleotide Sequence:  | >RG236913 representing NM_001301289.<br>Blue=ORF Red=Cloning site Green=Tag(s) |

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGGGAGTAGCTCGCTGGAGGCGGTGCGCAGGAAGATCCGGAGCCTGCAGGAGCAGGCGGACGCC
GCTGAGGAGCGCGCGGCCACCCTGCAGCGCAGCTGGACCACGAGAGGAAGCTGAGGGAGACCGCTGAA
GCCGACGTAGCTTCTCTGAACAGACGCATCCAGCTGGTTGAGGAAGAGTTGGATCGTGCCAGGAGCGT
CTGGCAACAGCTTTCAGAAGCTGGAGGAAGCTGAGAAGGCAGCAGATGAGAGTGAGAGAGGCATGAAA
GTCATTGAGAGTCGAGCCAAAAAGATGAAGAAAAATGGAAATTCAGGAGATCCAAGTAAAGAGGCC
AAGCACATTGCTGAAGATGCCGACGCAAATATGAAGAGGTGGCCGTAAGCTGGTCATCATTGAGAGC
GACCTGGAACGTGCAGAGGAGCGGGCTGAGCTCTCAGAAGGCAAATGTGCCGAGCTTGAAGAAGAATTG
AAAAGTGTGACGAACAATTGAAGTCACTGGAGGCTCAGGCTGAGAAGTACTCGCAGAAGGAAGACAGA
TATGAGGAAGAGATCAAGGTCCTTTCCGACAAGCTGAAGGAGGCTGAGACTCGGGCTGAGTTGCCGAG
AGGTCAGTAACTAAATTGGAGAAAAGCATTGATGACTTAGAAGAGAAAAGTGGCTCATGCCAAAGAAGAA
AACCTTAGTATGCATCAGATGCTGGATCAGACTTTACTGGAGTTAAACAACATG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG236913  
 Blue=ORF Red=Cloning site Green=Tag(s)

MAGSSSLEAVRRKIRSLQEQADAAEERAGTLQRELDHERKLRRETAEADVASLNRRIQLVEEELDRAQER  
 LATALQKLEEAKEAADESERGMKVIIESRAQKDEEKMEIQEIQKKEAKHIAEDADRKYEEVARKLVIIES  
 DLERAEEAELSEGKCALEEEELKTVTNLKSLEAQAEKYSQKEDRYEEEEIKVLSDKLKEAETRAEFAE  
 RSVTKLEKSIDDLEEKVAHAKEENLSMHQMLDQTLLLELNNM  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001301289

**ORF Size:** 744 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).

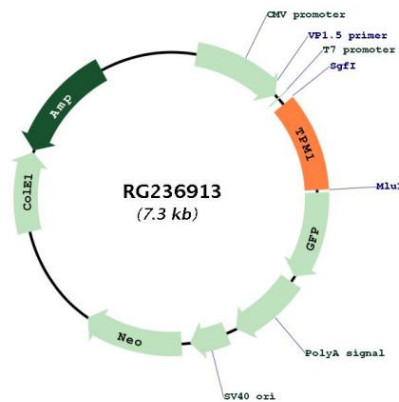
**RefSeq:** [NM\\_001301289.2](#)

**RefSeq Size:** 1629 bp

**RefSeq ORF:** 747 bp

**Locus ID:** 7168  
**Cytogenetics:** 15q22.2  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)  
**MW:** 29.1 kDa  
**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]

### Product images:



Circular map for RG236913