

## Product datasheet for **RG237175**

### Tropomyosin 2 (TPM2) (NM\_001301226) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Tropomyosin 2 (TPM2) (NM_001301226) Human Tagged ORF Clone                     |
| Tag:                      | TurboGFP   |
| Symbol:                   | TPM2   |
| Synonyms:                 | AMCD1; DA1; DA2B; DA2B4; HEL-S-273; NEM4; TMSB                                 |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:        | Ampicillin (100 ug/mL)   |
| ORF Nucleotide Sequence:  | >RG237175 representing NM_001301226.<br>Blue=ORF Red=Cloning site Green=Tag(s) |

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTGGACAAGGAGAACGCCATCGACCGCGCCGAG
CAGGCCGAAGCCGACAAGAAGCAAGCTGAGGACCCTGCAAGCAGCTGGAGGAGGAGCAGCAGGCCCTC
CAGAAGAAGCTGAAGGGGACAGAGGATGAGGTGGAAAAGTATTCTGAATCCGTGAAGGAGGCCAGGAG
AAACTGGAGCAGGCCGAGAAGAAGGCCACTGATGCTGAGGCAGATGTGGCCTCCCTGAACCGCCGATT
CAGCTGGTTGAGGAGGAGCTGGACCGGGCCAGGAGCGCCTGGCTACAGCCCTGCAGAAGCTGGAGGAG
GCCGAGAAGCGGCTGATGAGAGCGAGAGAGGAATGAAGGTCATCGAAAACCGGCCATGAAGGATGAG
GAGAAGATGGAAGTGCAGGAGATGCAGCTGAAGGAGGCCAAGCACATCGCTGAGGATTCAGACCGCAA
TATGAAGAGGTGGCCAGGAAGCTGGTATCCTGGAAGGAGAGCTGGAGCGCTCGGAGGAGAGGGCTGAG
GTGGCCGAGAGTAAATGTGGGACCTAGAGGAGGAGCTGAAAATTGTTACCAACAACTTGAATCCCTG
GAGGCCAGGCGGACAAGTATCCACCAAGAAGATAAATATGAAGAGGAGATCAAAGTGTGGAGGAG
AAGCTGAAGGAGGCTGAGACCGAGCAGAGTTTGGCCGAGAGGTCTGTGGCAAAGTTGGAGAAAACCATC
GATGACCTAGAAGAGACCTTGGCCAGTGCCAAGGAGGAGAACGTGCGAGATTCACCAGACCTTGGACCAG
ACCCTGCTGGAAGTCAACAACCTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237175  
 Blue=ORF Red=Cloning site Green=Tag(s)

MDAIIKKMQMLKLDKENAIDRAEQAEADKKQAEDRCKQLEEEQQALQKCLKGTEDEVEKYSESVKEAQE  
 KLEQAEEKATDAEADVASLNRRIQLVVEELDRAQERLATALQKLEEAKEAADESERGMKVIENRAMKDE  
 EKMELQEMQLKEAKHIAEDSDRKYEEVARKLVILEGELERSEERAEEVAESKCGDLEELKIVTNNLKSL  
 EAQADKYSTKEDKYEEEEIKLLEEKLKEAETRAEFAERSVAKLEKTIIDLEETLASAKEENVEIHQTLDQ  
 TLLLELNNL

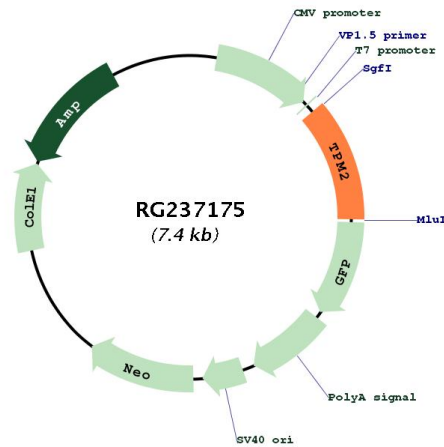
TRTRPLEMSDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001301226

|                          |  |
|--------------------------|--|
| <b>ORF Size:</b>         | 852 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>RefSeq:</b>           | <a href="#">NM_001301226.2</a>   |
| <b>RefSeq Size:</b>      | 1182 bp  |
| <b>RefSeq ORF:</b>       | 855 bp   |
| <b>Locus ID:</b>         | 7169   |
| <b>Cytogenetics:</b>     | 9p13.3   |
| <b>Protein Pathways:</b> | Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)  |
| <b>MW:</b>               | 33.3 kDa   |
| <b>Gene Summary:</b>     | This gene encodes beta-tropomyosin, a member of the actin filament binding protein family, and mainly expressed in slow, type 1 muscle fibers. Mutations in this gene can alter the expression of other sarcomeric tropomyosin proteins, and cause cap disease, nemaline myopathy and distal arthrogyrosis syndromes. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Mar 2009] |