

## Product datasheet for **RG236722**

### Tropomyosin 3 (TPM3) (NM\_001278190) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tropomyosin 3 (TPM3) (NM_001278190) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tropomyosin 3
Synonyms:	CAPM1; CFTD; HEL-189; HEL-S-82p; hscp30; NEM1; OK/SW-cl.5; TM-5; TM3; TM5; TM30; TM30nm; TPM3nu; TPMsk3; TRK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236722 representing NM_001278190. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTGGGATCACCAACATCGAGGCGGTGAAGCGCAAGATCCAGGTTCTGCAGCAGCAGGCAGATGAT
GCAGAGGAGCGAGCTGAGCGCCTCCAGCGAGAAGTTGAGGGAGAAAGCGGGCCCGGAACAGGCTGAG
GCTGAGGTGGCCTCCTTGAACCGTAGGATCCAGCTGGTTGAAGAAGAGCTGGACCGTGCTCAGGAGCGC
CTGGCCACTGCCCTGCAAAAGCTGGAAGAAGCTGAAAAAGCTGCTGATGAGAGTGAGAGAGGTATGAAG
GTTATTGAAAACCGGCCCTTAAAGATGAAGAAAAGATGGAACCTCAGGAAATCCAACCTCAAGAAGCT
AAGCACATTGCAGAAGAGGCAGATAGGAAGTATGAAGAGGTGGCTCGTAAGTTGGTGATCATTGAAGGA
GACTTGGAACGCACAGAGGAACGAGCTGAGCTGGCAGAGTCCCCTTGCCGAGAGATGGATGAGCAGATT
AGACTGATGGACCAGAACCTGAAGTGTCTGAGTGCTGCTGAAGAAAAGGCAGAGACCCGTGCTGAGTTT
GCTGAGAGATCGGTAGCCAAGCTGGAAAAGACAATTGATGACCTGGAAGATAAACTGAAATGCACCCAAA
GAGGAGCACCTCTGTACAAAAGGATGCTGGACCAGACCCGTGCTGACCTGAATGAGATG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



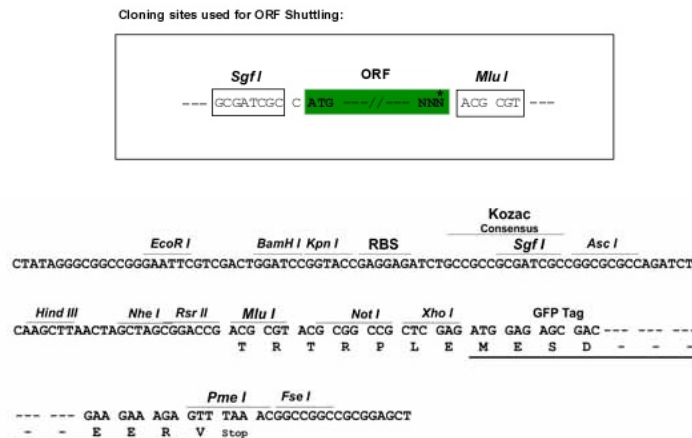
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG236722  
 Blue=ORF Red=Cloning site Green=Tag(s)

MAGITTTIEAVKRRKIQVLQQADDAEERAERLQREVEGERRAREQAEAEVASLNRRIQLVEEELDRAQER  
 LATALQKLEEAKEAADESERGMKVIENRALKDEEKMELQEIQKAKHIAEEADRKYEEVARKLVIIEG  
 DLERTEERAELAESRCREMDEQIRLMDQNLKCLSAAEKKAETRAEFAERSVAKLEKTIDDLKDKCTK  
 EEHLCTQRMLDQTLDDLNEM  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAVHHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001278190

**ORF Size:** 681 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).

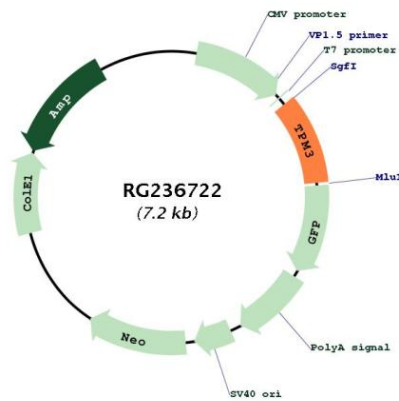
**RefSeq:** [NM\\_001278190.1](#), [NP\\_001265119.1](#)

**RefSeq Size:** 3149 bp

**RefSeq ORF:** 684 bp

**Locus ID:** 7170  
**Cytogenetics:** 1q21.3  
**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Pathways in cancer, Thyroid cancer  
**MW:** 26.9 kDa  
**Gene Summary:** This gene encodes a member of the tropomyosin family of actin-binding proteins. Tropomyosins are dimers of coiled-coil proteins that provide stability to actin filaments and regulate access of other actin-binding proteins. Mutations in this gene result in autosomal dominant nemaline myopathy and other muscle disorders. This locus is involved in translocations with other loci, including anaplastic lymphoma receptor tyrosine kinase (ALK) and neurotrophic tyrosine kinase receptor type 1 (NTRK1), which result in the formation of fusion proteins that act as oncogenes. There are numerous pseudogenes for this gene on different chromosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2013]

**Product images:**



Circular map for RG236722