

Product datasheet for **RG236349**

Tropomyosin 3 (TPM3) (NM_001278188) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tropomyosin 3 (TPM3) (NM_001278188) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TPM3
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:	>RG236349 representing NM_001278188. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGATGCAGAGGAGCGAGCTGAGCGCCTCCAGCGAGAAGTTGAGGGAGAAAGCGGGCCCGGAACAGA
GGTATGAAGGTTATTGAAAACCGGGCCTTAAAAGATGAAGAAAAGATGGAACCTCCAGGAAATCCAACTC
AAAGAAGCTAAGCACATTGCAGAAGAGGCGAGATAGGAAGTATGAAGAGGTGGCTCGTAAGTTGGTGATC
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GAGCAGATTAGACTGATGGACCAGAACCTGAAGTGTCTGAGTGTCTGAAGAAAAGTACTCTCAAAAA
GAAGATAAATATGAGGAAGAAATCAAGATTCTTACTGATAAACTCAAGGAGGCAGAGACCCGTGCTGAG
TTTGCTGAGAGATCGGTAGCCAAGCTGGAAAAGACAATTGATGACCTGGAAGATAAACTGAAATGCACC
AAAGAGGAGCACCTCTGTACACAAGGATGCTGGACCAGACCCTGCTTGACCTGAATGAGATG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236349
Blue=ORF Red=Cloning site Green=Tag(s)

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MMQRSELASSEKLREKGGPGNRGMKVIENRALKDEEKMELQEIQKAEKHIAEEADRKYEEVARKLVI
IEGDLRTEERAELAESRCREMDEQIRLMDQNLKCLSAEEKYSQKEDKYEEEEIKILTDKLKEAETRAE
FAERSVAKLEKTIDDLKDKLCTKEEHLCTQRMLDQTLDDLNEM
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
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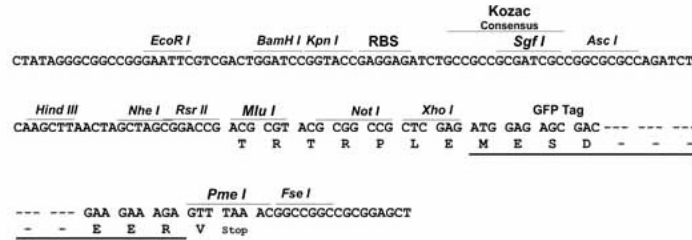
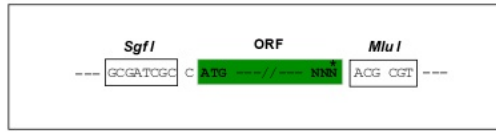


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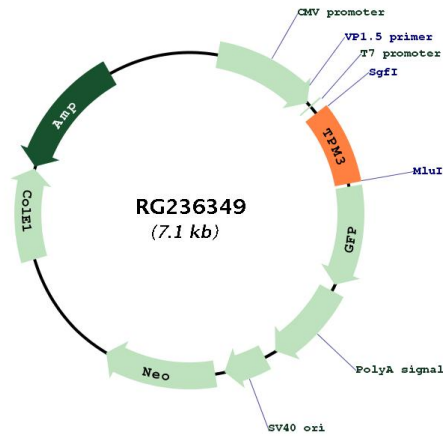
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001278188

ORF Size: 546 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_001278188.2
RefSeq Size:	3078 bp
RefSeq ORF:	549 bp
Locus ID:	7170
Cytogenetics:	1q21.3
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Pathways in cancer, Thyroid cancer
MW:	21.8 kDa
Gene Summary:	<p>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]</p>