

Product datasheet for **RG237176**

Tropomyosin 2 (TPM2) (NM_001301227) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tropomyosin 2 (TPM2) (NM_001301227) 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:	>RG237176 representing NM_001301227. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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CAGCTGGTTGAGGAGGAGCTGGACCGGGCCAGGAGCGCCTGGCTACAGCCCTGCAGAAGCTGGAGGAG
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GATGACCTAGAAGATGAAGTCTATGCCCAAGAAGATGAAGTACAAGGCCATTAGCGAGGAAGTGGACAAC
GCACTCAATGACATCACCTCCCTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG237176
 Blue=ORF Red=Cloning site Green=Tag(s)

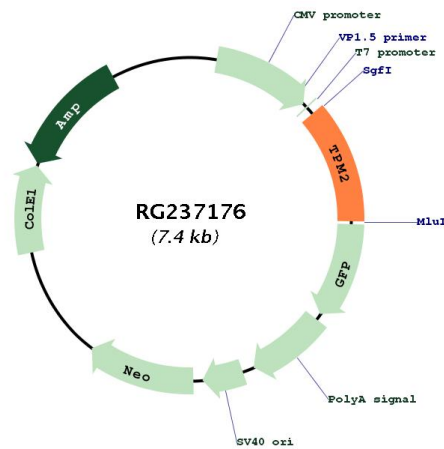
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 MASEEEYSTKEDKYEEEIKLLEEKLKEAETRAEFAERSVAKLEKTIIDLEDEVYAQMKMYKAI SEELDN
 ALNDITSL
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 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001301227

ORF Size:	852 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_001301227.1 , NP_001288156.1
RefSeq Size:	1327 bp
RefSeq ORF:	855 bp
Locus ID:	7169
Cytogenetics:	9p13.3
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)
MW:	33.5 kDa
Gene Summary:	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]