

Product datasheet for **RC236349**

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: Myc-DDK
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
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236349 representing NM_001278188
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGATGCAGAGGAGCGAGCTGAGCGCCTCCAGCGAGAAGTTGAGGGAGAAAGCGGGCCCGGAACAGAG
GTATGAAGGTTATTGAAAACCGGCCCTAAAAGATGAAGAAAAGATGGAAGTCCAGGAAATCCAACCTCAA
AGAAGCTAAGCACATTGCAGAAGAGGCAGATAGGAAGTATGAAGAGGTGGCTCGTAAGTTGGTGATCATT
GAAGGAGACTTGAACGCACAGAGGAACGAGCTGAGCTGGCAGAGTCCCCTTCCGAGAGATGGATGAGC
AGATTAGACTGATGGACCAGAACCTGAAGTGTCTGAGTGTGCTGAAGAAAAGTACTCTCAAAAAGAAGA
TAAATATGAGGAAGAAATCAAGATCTTACTGATAAACTCAAGGAGGCAGAGACCCGTGCTGAGTTTGTCT
GAGAGATCGGTAGCCAAGCTGGAAAAGACAATTGATGACCTGGAAGATAAACTGAAATGCACCAAAGAGG
AGCACCTCTGTACACAAAGGATGCTGGACCAGACCCTGCTTGACCTGAATGAGATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

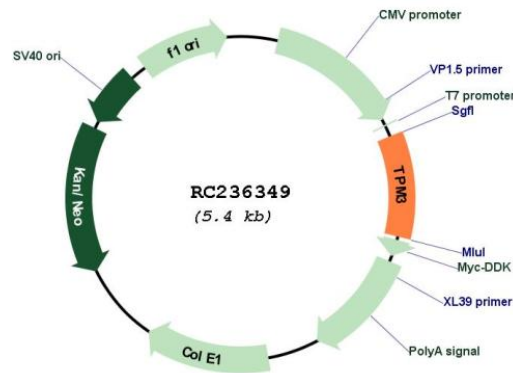
Protein Sequence: >RC236349 representing NM_001278188
Red=Cloning site Green=Tags(s)
MMQRSELASSEKLREKGGPGNRGMKVIENRALKDEEKMELQEIQLEAKHIAEEADRKYEEVARKLVII
EGDLERTEERAELAESRCREMDEQIRLMDQNLKCLSAEEKYSQKEDKYEEEIKILTDKLEAETRAEFA
ERSVAKLEKTIDDLKDKCTKEEHLCTQRMLDQTLDDLNEM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:

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).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_001278188.2</u>
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>