

# **Product datasheet for SC334037**

#### OriGene Technologies, Inc.

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## Tropomyosin 3 (TPM3) (NM\_001278191) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Tropomyosin 3 (TPM3) (NM 001278191) Human Untagged Clone

Tag: Tag Free 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-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC334037 representing NM\_001278191.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

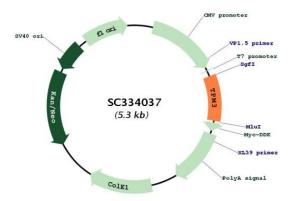
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul



#### Plasmid Map:



**ACCN:** NM\_001278191

**Insert Size:** 477 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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:** 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 001278191.1</u>

RefSeq Size: 3058 bp



### Tropomyosin 3 (TPM3) (NM\_001278191) Human Untagged Clone - SC334037

 RefSeq ORF:
 477 bp

 Locus ID:
 7170

 UniProt ID:
 P06753

 Cytogenetics:
 1q21.3

Protein Pathways: Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM),

Pathways in cancer, Thyroid cancer

**MW:** 18.6 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 Paffary May 2012]

by RefSeq, May 2013]

Transcript Variant: This variant (9) differs in the 5' UTR and contains multiple differences in the coding region, compared to variant Tpm3.1. It initiates translation at a downstream inframe start codon. The encoded isoform (9) is shorter than isoform Tpm3.1cy. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.