

Product datasheet for SC334243

OriGene Technologies, Inc.

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Tropomyosin 3 (TPM3) (NM_001278188) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Tropomyosin 3 (TPM3) (NM_001278188) Human Untagged Clone

Tag: Tag Free

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

Fully Sequenced ORF: >NCBI ORF sequence for NM_001278188, the custom clone sequence may differ by one or

more nucleotides

Restriction Sites: Sgfl-Mlul

ACCN: NM_001278188

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 001278188.1</u>, <u>NP 001265117.1</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

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]

Transcript Variant: This variant (6) lacks an exon in the 5' coding region, compared to variant Tpm3.1, and initiates translation at an alternate upstream start codon. The encoded isoform (6) is shorter and has a distinct N-terminus, compared to 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.