

Product datasheet for RG209904

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Tropomyosin 3 (TPM3) (NM_153649) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Tropomyosin 3 (TPM3) (NM_153649) 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 >RG209904 representing NM_153649

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

CACAAAGGATGCTGGACCAGACCCTGCTTGACCTGAATGAGATG





Protein Sequence:

>RG209904 representing NM_153649 Red=Cloning site Green=Tags(s)

MAGITTIEAVKRKIQVLQQQADDAEERAERLQREVEGERRAREQAEAEVASLNRRIQLVEEELDRAQERL ATALQKLEEAEKAADESERGMKVIENRALKDEEKMELQEIQLKEAKHIAEEADRKYEEVARKLVIIEGDL ERTEERAELAESRCREMDEQIRLMDQNLKCLSAAEEKYSQKEDKYEEEIKILTDKLKEAETRAEFAERSV AKLEKTIDDLEDKLKCTKEEHLCTQRMLDQTLLDLNEM

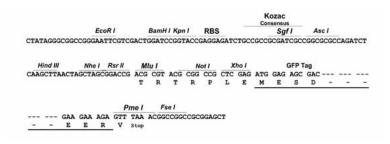
TRTRPLE - GFP Tag - V

Restriction Sites:

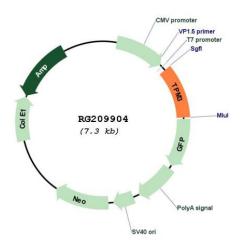
Sgfl-Mlul

Cloning Scheme:





Plasmid Map:



ACCN: NM_153649

ORF Size: 744 bp



Tropomyosin 3 (TPM3) (NM_153649) Human Tagged ORF Clone - RG209904

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: 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 153649.4</u>

 RefSeq Size:
 3212 bp

 RefSeq ORF:
 747 bp

 Locus ID:
 7170

 UniProt ID:
 P06753

 Cytogenetics:
 1q21.3

Domains: Tropomyosin

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]