

Product datasheet for SC319910

OriGene Technologies, Inc.

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Tropomyosin 2 (TPM2) (NM_213674) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Tropomyosin 2 (TPM2) (NM_213674) Human Untagged Clone

Tag: Tag Free

Symbol: Tropomyosin 2

Synonyms: AMCD1; DA1; DA2B; DA2B4; HEL-S-273; NEM4; TMSB

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_213674.1

TGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTGGACAAGGAGAACGCCATCGACC GCGCCGAGCAGCCGAAGCCGACAAGAAGCAAGCTGAGGACCGCTGCAAGCAGCTGGAGG AGGAGCAGCAGGCCCTCCAGAAGAAGCTGAAGGGGACAGAGGATGAGGTGGAAAAGTATT CTGAATCCGTGAAGGAGGCCCAGGAGAAACTGGAGCAGGCCGAGAAGAAGGCCACTGATG CTGAGGCAGATGTGGCCTCCCTGAACCGCCGCATTCAGCTGGTTGAGGAGGAGCTGGACC GGGCCCAGGAGCGCCTGCCTGCAGAAGCTGGAGAGGCCGAGAAGGCGGCTG ATGAGAGCGAGAGAGGAATGAAGGTCATCGAAAACCGGGCCATGAAGGATGAGGAGAAGA TGGAACTGCAGGAGATGCAGCTGAAGGAGGCCAAGCACATCGCTGAGGATTCAGACCGCA AATATGAAGAGGTGGCCAGGAAGCTGGTGATCCTGGAAGGAGAGCTGGAGCGCTCGGAGG AGAGGGCTGAGGTGGCCGAGACCGAGCCAGACAGCTGGAGGAGGAACTTCGAACCATGG ACCAGGCCCTCAAGTCCCTGATGGCCTCAGAGGAGGAGTATTCCACCAAAGAAGATAAAT ATGAAGAGGAGATCAAACTGTTGGAGGAGAAGCTGAAGGAGGCTGAGACCCGAGCAGAGT TTGCCGAGAGGTCTGTGGCAAAGTTGGAGAAAACCATCGATGACCTAGAAGAGACCTTGG CCAGTGCCAAGGAGGAGAACGTCGAGATTCACCAGACCTTGGACCAGACCCTGCTGGAAC TCAACAACCTGTGAGGGCCAGCCCACCCCAGCCAGGCTATGGTTGCCACCCCAACCCA

AAAAAA

Restriction Sites: Please inquire **ACCN:** NM 213674





Tropomyosin 2 (TPM2) (NM_213674) Human Untagged Clone - SC319910

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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 213674.1</u>, <u>NP 998839.1</u>

9p13.3

 RefSeq Size:
 1182 bp

 RefSeq ORF:
 855 bp

 Locus ID:
 7169

 UniProt ID:
 P07951

Cytogenetics:

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

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 arthrogryposis syndromes. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Mar 2009] Transcript Variant: This variant (Tpm2.1, also known as variant 2) has an alternate internal exon and an alternate 3' exon, as compared to variant Tpm2.2. The resulting isoform (Tpm2.1sm/cy, also known as isoform 2) has a different internal segment and a different C-

terminus, but has the same protein size, as compared to isoform Tpm2.2st.