

Product datasheet for **RC237176**

Tropomyosin 2 (TPM2) (NM_001301227) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Tropomyosin 2 (TPM2) (NM_001301227) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TPM2
Synonyms: AMCD1; DA1; DA2B; DA2B4; HEL-S-273; NEM4; TMSB
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC237176 representing NM_001301227
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTGGACAAGGAGAACGCCATCGACCGCGCCGAGC
AGGCCGAAGCCGACAAGAAGCAAGCTGAGGACCGCTGCAAGCAGCTGGAGGAGGAGCAGCAGGCCCTCCA
GAAGAAGCTGAAGGGGACAGAGGATGAGGTGGAAAAGTATTCTGAATCCGTGAAGGAGGCCAGGAGAAA
CTGGAGCAGGCCGAGAAGAAGGCCACTGATGCTGAGGCAGATGTGGCCTCCCTGAACCGCCGATTCAGC
TGGTTGAGGAGGAGCTGGACCGGCCAGGAGCGCCTGGCTACAGCCCTGCAGAAGCTGGAGGAGGCCGA
GAAGGCGGCTGATGAGAGCGAGAGAGGAATGAAGGTCAATCGAAAACCGGCCATGAAGGATGAGGAGAAG
ATGGAAGTGCAGGAGATGCAGCTGAAGGAGGCCAAGCACATCGCTGAGGATTCAGACCGCAAATATGAAG
AGGTGGCCAGGAAGCTGGTGATCCTGGAAGGAGAGCTGGAGCGCTCGGAGGAGAGGGCTGAGGTGGCCGA
GAGCCGAGCCAGACAGCTGGAGGAGGAACCTCGAACCATGGACCAGGCCCTCAAGTCCCTGATGGCTCA
GAGGAGGAGTATCCACCAAGAAGATAAATATGAAGAGGAGATCAAACCTGTTGGAGGAGAAGCTGAAGG
AGGCTGAGACCCGAGCAGAGTTTGCCGAGAGGTCTGTGGCAAAGTTGGAGAAAACCATCGATGACCTAGA
AGATGAAGTCTATGCCCGAAGATGAAGTACAAGGCCATTAGCGAGGAAGTGGACAACGCACTCAATGAC
ATCACCTCCCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC237176 representing NM_001301227
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MDAIIKKMQMLKLDKENAIDRAEQAEADKKQAEDRCKQLEEEQQALQKCLKGTEDEVEKYSESVKEAQEK
 LEQAEKKATDAEADVASLNRIQLVEEELDRAQERLATALQKLEEAKEKADESERGMKVIENRAMKDEEK
 MELQEMQLKEAKHIAEDSDRKYEYEVARKLVILEGELERSEERAEVAESRARQLEEEELRTMDQALKSLMAS
 EEEYSTKEDKYEEEIKLLEEKLEAEETRAEFAERSVAKLEKTIDDLDEEVYAQMKMYKAISEELDNLND
 ITSL

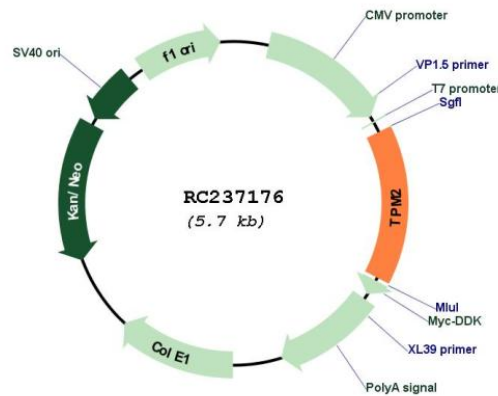
TRTRP**LEQKLISEEDLA**NDILDYKDDDDK**V**

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001301227

ORF Size: 852 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:	NM_001301227.1 , NP_001288156.1
RefSeq Size:	1327 bp
RefSeq ORF:	855 bp
Locus ID:	7169
Cytogenetics:	9p13.3
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)
MW:	33.5 kDa
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]