

Product datasheet for **MR217002**

Tpm1 (NM_001164251) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tpm1 (NM_001164251) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tpm1
Synonyms:	AA986836; AI854628; alpha-TM; TM2; Tm3; Tmpa; Tpm-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217002 representing NM_001164251 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTCGACAAAGAGAACGCCTTGGATCGAGCTGAGC
AAGCGGAGGCTGATAAGAAGGCGCGGAAGACCGGAGCAAGCAGCTGGAAGATGAGCTGGTGTCACTGCA
AAAGAACTCAAGGCACTGAAGATGAAGTGGACAAATACTCCGAGGCTCTCAAAGATGCCAGGAGAAA
CTGGAGCTGGCGGAGAAAAGGCCACAGATGCTGAAGCTGACGTAGCTTCTCTGAACAGACGCATCCAGC
TGTTGAGGAGGAGTTGGATCGTGCTCAGGAGCGTCTGGCCACAGCTCTGCAGAAGCTGGAGGAGCCGA
GAAGGCTGCAGATGAGAGTGAGAGAGGCATGAAAGTCATTGAAAGCCGAGCCAAAAAGATGAAGAAAAG
ATGGAGATTCAGGAGATCCAGCTGAAAGAGGCCAAGCACATTGCTGAAGATGCTGACCGGAAGTATGAAG
AGGTGGCCCGTAAGCTGGTCAATCGAGAGCGACCTGGAACGTGCAGAGGAGCGGGCTGAGCTCTCAGA
AGGCCAAGTTCGACAGCTGGAAGAACAGTTAAGAATAATGGATCAGACCTTGAAGCATTAAATGGCTGCA
GAGGATAAGTACTCTCAGAAGGAAGACAAATATGAAGAGGAGATCAAGTTCTCTCTGACAAGCTGAAGG
AGGCTGAAACTCGGGCTGAGTTTGAGAGAGATCAGTAACCAAATGGAGAAAAGCATTGATGACTTAGA
AGACGAGCTGTATGCTCAGAACTGAAGTACAAGGCCATCAGCGAGGAGCTGGACCACGCTCTCAACGAT
ATGACTTCATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR217002 representing NM_001164251
 Red=Cloning site Green=Tags(s)

MDAIIKKMQLKLDKENALDRAEQAEADKKAEDRSKQLEDELVSLQKCLKGTEDELDKYSEALKDAQEK
 LELAEEKATDAEADVASLNRRIQLVEEELDRAQERLATALQKLEEAKEAADESERGMKVIESRAQKDEEK
 MEIQEIQLKEAKHIAEDADRKYEEVARKLVIIIESDLERAEEAELSEGQVRQLEEQRLIMDQTLKALMAA
 EDKYSQKEDKYEEEIKVLSDKLKEAETRAEFAERSVTKLEKSIDDELELYAQKLYKAISEELDHALND
 MTSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001164251

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:

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_001164251.1](#), [NP_001157723.1](#)

RefSeq Size: 1210 bp

RefSeq ORF: 855 bp

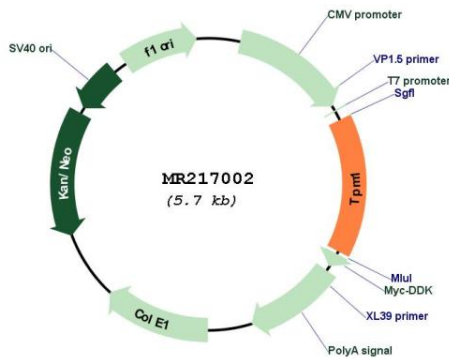
Locus ID: 22003

Cytogenetics: 9 36.27 cM

MW: 33.3 kDa

Gene Summary: Binds to actin filaments in muscle and non-muscle cells. Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217002