

## Product datasheet for **MR203134**

### Tpm4 (NM\_001001491) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tpm4 (NM_001001491) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tpm4
Synonyms:	2610528G24Rik; Tpm4.2; Tpm4.2cy
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203134 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGGCCTCAACTCACTGGAGGCAGTGAAGCGCAAGATCCAGGCCCTGCAGCAGCAGGCAGACGACG  
CAGAGGATCGCGCGCAAGGCCTGCAGCGCAACTGGATGGCGAGCGGAGCGCGGAGAAAGCTGAAGG  
AGATGCAGCCGCTCTCAACCGCCGATCCAACCTGCTGGAGGAGGAAGTGGACCGGCTCAGGAGCAGCTG  
GCCACAGCCCTGCAGAATCTGGAAGAGGCAGAGAAGGCTGCTGATGAGAGTGAGAGAGGCATGAAGGTAA  
TAGAGAACCGAGCCATGAAAGATGAGGAAAAGATGGAGATCCTGGAGATGCAGCTCAAAGAAGCCAAGCA  
CATCACTGATGAAGCCGACCGCAAGTATGAGGAGGTTGCTCGTAAAGTTGGTCATCCTGGAGGGTGAGCTG  
AAAAGAGCAGAGGAGCGGGCGGAGGTATCTGAACTAAAGTGTGGTGACCTGGAAGAAGAGCTCAAGAATG  
TAACTAACAATCTGAAATCACTGGAGGCTGCTTCTGAAAAGTATTCTGAAAAGGAGGATAAATATGAAGA  
AGAAATCAAGCTTCTGTCTGACAAGCTGAAGGAGGCTGAGACCCGAGCTGAGTTTGCAGAAAAGGACAGTT  
TCTAACTGGAGAAGACAATCGATGACCTGGAAGAAAACTTGCCAGGCCAAAGAAGAGAATGTGGGCT  
TACATCAGACACTGGACCAGACACTAACGAACCTAACTGTATA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR203134 protein sequence  
Red=Cloning site Green=Tags(s)

MAGLNSLEAVKRRKIQALQQADDAEDRAQGLQRELDGERERREKAEGDAAALNRRIQLLEEELDRAQEQL  
 ATALQNLEEAKEAADESERGMKVIENRAMKDEEKMEILEMQLKEAKHITDEADRYEEVARKLVILEGEL  
 KRAEERAIEVSELKCGDLEELKNVTNNLKSLEAASEKYEKEDKYEEEEIKLLSDKLKEAETRAEFAERTV  
 SKLEKTIDDLKLAQAKEENVGLHQTLNQTLNELNCI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001001491

**ORF Size:** 747 bp

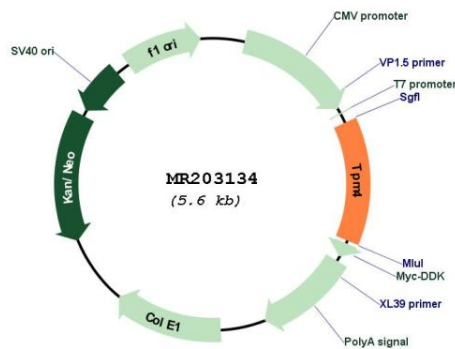
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001001491.1](#), [NP\\_001001491.1](#)
- RefSeq Size:** 2082 bp
- RefSeq ORF:** 747 bp
- Locus ID:** 326618
- UniProt ID:** [Q6IRU2](#)
- Cytogenetics:** 8 B3.3
- MW:** 28.5 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. Binds calcium. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR203134