

Product datasheet for **RR216240**

Tpm1 (NM_001034069) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Tpm1 (NM_001034069) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Tpm1
Synonyms: Alpha-tm; Tma2; Tmsa
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR216240 representing NM_001034069
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTCGACAAAGAGAACGCCTTGGATCGAGCAGAGC
AGGCGGAGGCTGACAAGAAGGCTGCGGAAGACCGGAGCAAGCAGCTGGAAGATGAGCTGGTGTCACTGCA
AAAGAACTCAAGGGCACTGAAGATGAACTGGACAAATACTCCGAGGCTCTCAAAGATGCCAGGAGAAA
CTGGAGCTGGCGGAGAAAAGGCCACAGATGCTGAAGCTGACGTAGCATCTCTGAACAGACGCATCCAGC
TGTTGAGGAGGAGTTGGATCGCGCTCAGGAGCGTCTGGCCACAGCTCTACAGAAGCTGGAGGAGGCTGA
GAAGGCTGCAGATGAGAGTGAGAGAGGCATGAAAGTCATTGAAAGCCGAGCCAAAAAGATGAAGAAAAG
ATGGAGATTCAGGAGATCCAGCTGAAAGAGGCCAAGCACATTGCTGAAGATGCTGACCGAAAAGTATGAAG
AGGTGGCCCGTAAGCTGGTCATCATCGAGAGCGATCTGGAGCGTGCGGAGGAGAGGGCTGAGCTCTCGGA
AGGCAATGTGCCGAGCTTGAAGAAGAGTTGAAAACGGTGACGAACAACCTGAAGTCACTGGAGGCTCAG
GCTGAGAAGTACTCTCAGAAAAGAAGACAAGTATGAAGAGGAGATCAAGTTCTCTCTGACAAGCTGAAGG
AGGCTGAGACCCGGGCTGAGTTTGCAGAGAGATCAGTAACCAAATGGAGAAAAGCATTGATGACTTAGA
AGAGAAAAGTGGCACATGCCAAAGAAGAAAACCTTAGTATGCACCAGATGCTGGACCAGACTTTACTGGAG
CTAAACAACATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RR216240 representing NM_001034069
 Red=Cloning site Green=Tags(s)

MDAIIKKMQMLKLDKENALDRAEQAEADKKAEDRSKQLEDELVSLQKCLKGTEDELDKYSEALKDAQEK
 LELAEEKATDAEADVASLNRRIQLVEEELDRAQERLATALQKLEEAKEADESERGMKVIESRAQKDEEK
 MEIQEIQLKEAKHIAEDADRKYEEVARKLVIIESDLERAEEAELSEGKCAELEELKTVTNLKSLEAQ
 AEKYSQKEDKYEEEIKVLSDKLKEAETRAEFAERSVTKLEKSIDDLEEKVAHAKEENLSMHQMLDQTLLE
 LNNM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

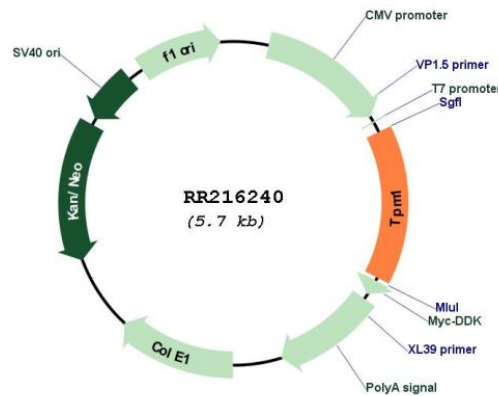
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001034069

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_001034069.1 , NP_001029241.1
RefSeq Size:	1740 bp
RefSeq ORF:	855 bp
Locus ID:	24851
UniProt ID:	P04692
Cytogenetics:	8q24
MW:	32.7 kDa
Gene Summary:	This gene is a member of the tropomyosin family and encodes a protein that heterodimerizes with a beta subunit, binding actin in both muscle and nonmuscle cells. In both smooth and striated muscle cells, it plays a role in calcium dependent-regulation of muscle contraction. In nonmuscle cells, it stabilizes cytoskeleton actin filaments. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]