

## Product datasheet for **RN216241**

### **Tpm1 (NM\_001034070) Rat Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tpm1 (NM_001034070) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Tpm1
Synonyms:	Alpha-tm; Tma2; Tmsa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN216241 representing NM_001034070 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTCGACAAAGAGAACGCCTTGGATCGAGCAGAGC  
AGGCGGAGGCTGACAAGAAGGCTGCGGAAGACCGGAGCAAGCAGCTGGAAGATGAGCTGGTGTCACTGCA  
AAAGAACTCAAGGGCACTGAAGATGAAGTGGACAAATACTCCGAGGCTCTCAAAGATGCCAGGAGAAA  
CTGGAGCTGGCGGAGAAAAAGGCCACAGATGCTGAAGCTGACGTAGCATCTCTGAACAGACGCATCCAGC  
TGTTGAGGAGGAGTTGGATCGCGCTCAGGAGCGTCTGGCCACAGCTCTACAGAACTGGAGGAGGCTGA  
GAAGGCTGCAGATGAGAGTGAGAGAGGCATGAAAGTCATTGAAAGCCGAGCCAAAAAGATGAAGAAAAAG  
ATGGAGATTCAAGGAGATCCAGCTGAAAGAGGCCAAGCACATTGCTGAAGATGCTGACCGAAAGTATGAAG  
AGGTGGCCCGTAAGCTGGTCATCATCGAGAGCGATCTGGAGCGTGCGGAGGAGAGGGCTGAGCTCTCGGA  
AGGCCAAGTTCGACAGCTGGAAGAAGAGTTAAGAATAATGGATCAGACCTTGAAAGCATTAAATGGCTGCA  
GAGGATAAGTACTCTCAGAAAGAAGACAAGTATGAAGAGGAGATCAAGTTCTCTCTGACAAGCTGAAGG  
AGGCTGAGACCCGGGCTGAGTTTGCAGAGAGATCAGTAACCAAATTGGAGAAAAGCATTGATGACTTAGA  
AGAGAAAGTGGCACATGCCAAAGAAGAAACCTTAGTATGCACCAGATGCTGGACCAGACTTTACTGGAG  
CTAAACAACATG**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001034070
Insert Size:	855 bp



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<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_001034070.1</a></u> , <u><a href="#">NP_001029242.1</a></u>
<b>RefSeq Size:</b>	1740 bp
<b>RefSeq ORF:</b>	855 bp
<b>Locus ID:</b>	24851
<b>Cytogenetics:</b>	8q24
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (Tpm1.7, also known as variant 3) has multiple differences in the coding region, compared to variant 1, resulting in a shorter protein (isoform Tpm1.7cy, also referred to as TM-3). Isoform Tpm1.7cy is the same length as isoforms Tpm1.6cy and Tpm1.3sm but is the product of alternate splicing and contains short regions of sequence differences.</p>