

Product datasheet for RN210760

Tpm2 (NM_001024345) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tpm2 (NM_001024345) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Tpm2
Synonyms:	MGC109519
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN210760 representing NM_001024345 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGCCATCAAGAAGAAGATGCAGATGCTGAACTGGACAAGGAGAATGCCATCGACCCGCGAGAGC
AGGCCGAAGCCGACAAGAAGCAAGCTGAAGACCGATGCAAGCAGCTGGAGGAAGAGCAGCAGGCCCTCCA
GAAGAACTGAAGGGGACAGAGGATGAGGTGGAAGTATTCCGAGTCTGTGAAGGATGCCCAGGAGAAA
CTGGAGCAGGCCGAGAAGAAGGCCACCGATGCTGAAGCAGATGTGGCTTCTCTGAATCGACGCATTACAG
TCGTAGAGGAGGAGTTGGATCGGGCACAGGAGCGCCTGGCTACAGCCTTGCAAAAGCTGGAGGAGGCTGA
GAAAGCCGCTGATGAGAGCGAGAGAGGAATGAAGGTCATTGAGAACCAGGCCATGAAGGATGAGGAGAAG
ATGGAGCTGCAGGAGATGCAGCTGAAAGAAGCCAAGCACATCGCTGAGGACTCAGACCGCAAATACGAGG
AGGTGGCCAGGAAGCTGGTGATCCTGGAAGGAGAGCTGGAGCGCTCTGAAGAGAGAGCCGAGGTGGCTGA
GAGCCGAGCCAGGCAGCTGGAGGAGGAGCTTCGAACCATGGACCAGGCTCTCAAGTCGCTGATAGCCTCA
GAGGAGGAGTATTCCACCAAGAGGACAATAACGAAGAAGAGATCAAACCTCTGGAGGAGAAGCTGAAGG
AGGCTGAGACCCGAGCAGAGTTTGGCTGAAAGATCTGTGGCAAAGTTGGAGAAAACCATCGATGACCTGGA
AGAGACTTTGGCTAGTGCCAAGGAAGAGAACGTGGAGATTACCAGACCTTGACCAGACCTTCTGGAA
CTCAACAACCTGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_001024345
Insert Size:	855 bp



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OTI Disclaimer:	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).
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:	<u>NM_001024345.2</u> , <u>NP_001019516.1</u>
RefSeq Size:	1116 bp
RefSeq ORF:	855 bp
Locus ID:	500450
UniProt ID:	<u>P58775</u>
Cytogenetics:	5q22
Gene Summary:	<p>Binds to actin filaments in muscle and non-muscle cells (PubMed:7568216, PubMed:22812662). Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction (PubMed:22812662). Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments. The non-muscle isoform may have a role in agonist-mediated receptor internalization (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (Tpm2.1, also known as variant 2) has an alternate internal exon and an alternate 3' exon, as compared to variant Tpm2.2. The resulting isoform (Tpm2.1sm/cy, also known as isoform 2) has a different internal segment and a different C-terminus, but has the same protein size, as compared to isoform Tpm2.2st.</p>