

Product datasheet for **MR224660**

Mtm1 (NM_001164193) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mtm1 (NM_001164193) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Mtm1
Synonyms: AF073996; mKIAA4176; Mtm
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR224660 representing NM_001164193
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCTTCTGCATCAGCATCTAAGTATAATTCACACTCCTTGGAGAATGAATCCATTAAGAAAGTGCTC
AAGATGGAGTCAGTCAGGATGTGAGTGAGACTGTCCTCGGCTCCAGGGGAGTTACTAATTACTGAAAA
AGAAGTTATTTACATATGTCCTTTCAATGGCCCCATTAAGGGAAGAGTTTACATCACAAATTATCGTCTT
TATTTAAGAAGTTTGAAACGGATTCTGCTCTAATACTTGATGTTCTCTGGGTGTGATCAAGAATTG
AAAAAATGGGAGGCGCGACAAGTAGAGGAGAAAATTCCTATGGTCTAGATATTACTTGTAAGATTTGAG
AAACCTGAGGTTTGCAATGAAGCAAGAAGGCCACAGCAGAAGAGATATGTTTGAGATCCTTGTA AACAT
GCCTTCTCTGGCACACAATCTGGCTAACCTGAAACTCATGATCCTGTTACCTCGACCTCCTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR224660 representing NM_001164193
Red=Cloning site Green=Tags(s)

MASASASKYNSHLENESIKKVSQDGVSDVSETPRPLPGELLITEKEVIYICPFNGPIKGRVYITNYRL
YLRSLTDSALILDVPLGVISRIEKMGGATSRGENSYGLDITCKDLRNLRFALKQEGHSRRDMFEILVKH
AFPLAHNLANLKMILLPRPPE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

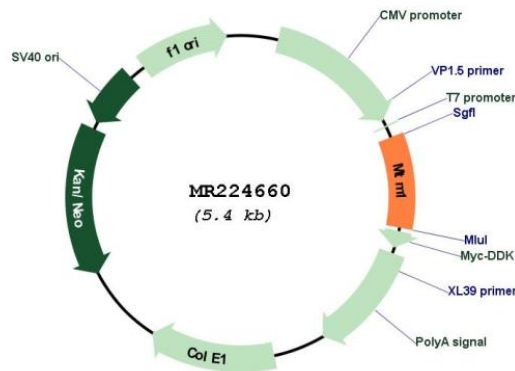


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM_001164193

ORF Size: 486 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:	<u>NM_001164193.1, NP_001157665.1</u>
RefSeq Size:	770 bp
RefSeq ORF:	489 bp
Locus ID:	17772
Cytogenetics:	X 36.55 cM
MW:	18.6 kDa
Gene Summary:	Lipid phosphatase which dephosphorylates phosphatidylinositol 3-monophosphate (PI3P) and phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2). Has also been shown to dephosphorylate phosphotyrosine- and phosphoserine-containing peptides. Negatively regulates EGFR degradation through regulation of EGFR trafficking from the late endosome to the lysosome. Plays a role in vacuolar formation and morphology (By similarity). Regulates desmin intermediate filament assembly and architecture. Plays a role in mitochondrial morphology and positioning (PubMed:21135508). Required for skeletal muscle maintenance but not for myogenesis (PubMed:12391329). In skeletal muscles, stabilizes MTMR12 protein levels (PubMed:23818870).[UniProtKB/Swiss-Prot Function]