

## Product datasheet for **MR208680**

### **Mtmr9 (NM\_177594) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mtmr9 (NM_177594) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mtmr9
Synonyms:	9430075G12Rik; AA516943; AF073881; LIP-STYX; mMTMH3; MTMR8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208680 representing NM\_177594  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGTTTTCGGAGCTGATTAACCCACGGGTAGACAATGTGGTGCACCGCCTTCTACACCG  
 CCGTGAAGGACCCCTGTGTCTGACAGGCCACCACCTGATCCTGTCTCCCGGCAGGACAACACGGAGGA  
 GCTCTGGCTCCTCCATTCAAATATCGACGCCATCGACAAACGATTTGTGGCTCTCTGGGTACCATCATC  
 ATAAAATGTAAAGATTTCCGAATCATTAGTTGGATATTCTGGAATGGAGGAGTGTAAATATAGCCA  
 GTTCCATTGAGGCATTGTCCACTCTGGACTCGGTACCCTGATGTACCCTTTCTTCTACCGACCCATGTT  
 TGAAGTGATTGAAGATGGCTGGCATTCTTCTCTGAGCAAGAATTTGAGTTCTACTCTTCTGCTACC  
 AGTGAATGGAGACTGAGCTATATCAATAAGGACTTTTCTATCTGTCTTCTACCCACCACTGTCATTG  
 TGCCCAAGTCCGTCGATGACGAAGCACTTCGGAAGGTAGCAGCCTCCGACATGGGGGGCGCTTCCCAGT  
 CCTGAGCTATTACCATAAAAAGAATGGCATGGTATTATGCGAAGTGGTACGCCCTGACCGGCACAAAC  
 GGGAGGAGGTGCAAGGAAGACGAGAAGCTGATAAATGCCACCCTCAGGGCAGGAAAGCGTGGCTACCTTA  
 TTGACACCAGATCCCTAAATGTGGCCAGCAAGCTAGAGCCAAAGGAGGTGGCTTTGAACAGGAGGCTCA  
 TTATCCCCAGTGGAGCGGATTACAAGTCCATTGAGAGATACCATGTTCTTCCAGGAGAGCTAATCAAA  
 CTCGTGGAAGCATGTAATGAACAAACCCACAACATGGACCGGTGGCTCGGCAAGTTGGAGGCCTCCAATT  
 GGCTGACACACATCAAGGAGATTCTGACCACCGCTGCTGGCGGCCAGTGCATTGACAGGGAAGGTGC  
 ATCAGTGTGATTGATGGGACAGAAGGAAGTATTCCACTGCAGGTGACTTCTTGGCCAGATCATC  
 CTGGAACCAAGAAGCAGGACCATCCGAGGCTTTGAGGCCCTGATAGAGAGGGAGTGGCTGCAGCCTGGTC  
 ACCCATCCAACAGCGCTGTGCACAGTCAGCCTATTGCAGCAGCAAGCAGAAGTGGGAGGCCCCCGTGT  
 TCTTCTCTTCTGGACTGCGTGTGGCAGATCCTCCGGCAGTCCCTTGTCTCGAGTTAATGAGCAT  
 TTTCTCATCATGCTCTTTGAGCATGCTTATGCCTCACAGTTCGGGACATTCTGGCAACAAATGAAAGTG  
 AAAGATGTAAGTTGAAGCTACAACAGAAAACAATGTCTTTGTGGTCAATCGGCCCGCGGAGCT  
 GAGTAAGTTCACCAATCCACTCTTTGAAGCCAACAACCTGGTCACTGCGCTTCTGTGGCCACAGAGT  
 CTTGAGCTGTGGGAAGGAATCTTCTACGCTGGAGCAGATCCTCCAAGTATCTGGATGAAGCATATGAGG  
 AAATGGTTAACATCATTGAATATAACAAGGAGTTACAAGCAAGGTCAATGTCCTGAGAAGGCAGTTGGC  
 TGAATTGGAAACAGAGGATGGGCTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208680 representing NM\_177594  
 Red=Cloning site Green=Tags(s)

MEFAELIKTPRVDNVVLRPHYTAVEGTLCLTGHHLILSSRQDNTEELWLLHNSIDAIDKRFVGLGTII  
 IKCKDFRIIQLDIPGMEELNIIASSIEALSTLDSVTLMPFFYRPMFEVIEDGWHSFLPEQEFEFYSSAT  
 SEWRLSYINKDFSICPSYPPTVIVPKSVDEALRKVAAFRHGGRFPVLSYYHKKNGMVMIMRSQPLTGTN  
 GRRCKEDEKLINATLRAGKRGYLIDTRSLNVAQQARAKGGGFEQEAHYQPWRRIHKSIERYHVLQESLIK  
 LVEACNEQTHNMDRWLGKLEASNWLTHIKEILTTACLAQCIDREGASVLIHGTEGTDSTLQVTSLAQII  
 LEPRSRTIRGFELIEREWLQAGHPFQQRCAQSAYCSSKQKWEAPVLLFLDCVWQILRQFPCSEFNEH  
 FLIMLFEHAYASQFGTFLGNNESEKCLKLQKTMWSLWSWVNRPGELSKFTNPLFEANLVIWPSVAPQS  
 LQLWEGIFLRWSRSSKYLDEAYEEMVNIIEYNKELQAKVNVLRRLAELETEDGL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9044\\_d09.zip](https://cdn.origene.com/chromatograms/mm9044_d09.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_177594

**ORF Size:** 1635 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:**
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\\_177594.1](#), [NP\\_808262.1](#)

**RefSeq Size:** 2457 bp

**RefSeq ORF:** 1638 bp

**Locus ID:** 210376

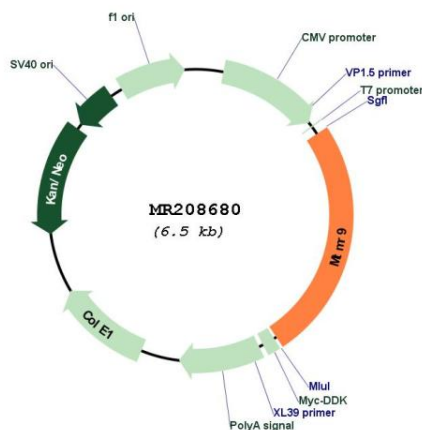
**UniProt ID:** [Q9Z2D0](#)

**Cytogenetics:** 14 D1

**MW:** 63.4 kDa

**Gene Summary:** Acts as an adapter for myotubularin-related phosphatases (PubMed:12890864). Increases lipid phosphatase MTMR6 catalytic activity, specifically towards phosphatidylinositol 3,5-bisphosphate, and MTMR6 binding affinity for phosphorylated phosphatidylinositols (By similarity). Positively regulates lipid phosphatase MTMR7 catalytic activity (PubMed:12890864). The formation of the MTMR6-MTMR9 complex, stabilizes both MTMR6 and MTMR9 protein levels (By similarity). Plays a role in the late stages of macropinocytosis possibly by regulating MTMR6-mediated dephosphorylation of phosphatidylinositol 3-phosphate in membrane ruffles (By similarity). Negatively regulates DNA damage-induced apoptosis, in part via its association with MTMR6 (By similarity). Does not bind mono-, di- and tri-phosphorylated phosphatidylinositols, phosphatidic acid and phosphatidylserine (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208680