

Product datasheet for **MR209453**

Mtmr6 (NM_144843) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mtmr6 (NM_144843) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mtmr6
Synonyms:	4022440C11Rik; AI428804; AU041072
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR209453 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCACATCCGGACAACCAAGTTGAACAAGTAAAGTTACTTGACCGGTTTAGTACCAACAACAAGT
 CACTGACAGGAACACTGTATCTTACGGCCACACCTATTATTTATTGACGCTCAGCAAAAAGAAACCTG
 GATACTACACCACCATATTGCCTCTGTGGAGAACTTGCTCTGACCACTTCTGGATGCCACTTGTGATT
 CAGTGAAGAAGTTCAGGATTGTGCATTTATTGTTCCAGGGAAAGAGATTGCCACGATATTTATAACT
 CTCTCTGCGACTATCAAAAAGCAAAAATGAAGATCTCTATGCCTTCTTTATAATCCCAAGCAAAA
 TGATACTGAACGACGGAATGTTGGCAGCTTATTGACCTTGCTGCGGAGTATGAGAGGATGGGAGTGCC
 AATGCAAACTGGCAACTGTCGGATGCCAACCGAGAGTACAAGGTCTGTGAGACTTATCCAGAGAGCTGT
 ATGTTCTCGGACAGCTAGCCGGCCGGTATCGTGGGCAGTTCCAACCTCCGGAGCAAGGGCAGACTTCC
 GGTCTATCTACTGCCGCGAGGCACTGAGGCTGCCATTTGTCGATGTAGTCAGCCATTGTCAGGCTTC
 AGTGCCAGGTGCCTAGAGGATGAGCATTGCTTCAAGCCATTAGTAAAGCCAACCCAGGAAACCGCTACA
 TGTATGTTGTGGATACCGGCCAAGCTCAATGCAATAGCTAACAGAGCAGCTGGAAAAGGTTATGAAAA
 TGAAGACAATATTCTAATATTAGATTTAGATTGCTTGGAAATAGAAAATATTCTATGTCATGAGATCCAGC
 CTTCAGAAATTACTGGAAGTGAATGGTAGCAAGGGGCTTCTGTCAATGATTTCTACTCTGGTTTGGAAA
 GTTCAGGATGGCTTCGCCATATCAAGGCTGTTTGGATGCTGCAATCTTCTTAGCCAAAGCAATAGTGGT
 TGAAAAAGCAAGTGTGTTGGTCCACTGTCCGATGGGTGGGACAGGACCTCCAAGTGTGCTCCCTCGGC
 TCACGTGTTGTTGGATTCCTACTACAGGACAATGAAAGGATTGATGGTTTTAATAGAAAAGATTGGATAT
 CATTGGGCATAAATTTTCAGAGAGGTGTGGCCATTTGGATGGAGACCCGAGGGAGGTCTACCGAGTGT
 CACTCAGTTCTTGAGTGTGCTGGCACCTGACTCAGCAGTTCACACAAGCCTTCGAGTTCAACGAAGCG
 TTTCTTCTCAGATCCATGAGCACATTCATTCATGCCAATTTGGGAACCTCCTTGCAACTGTGAGAAGG
 AGAGAGAGGAACTCAGGTTAAAGGAGAAAACTTACTCCCTGTGGCCTTTTCTTTGGATGACAAAAAGAA
 GTACTTAAATCCTCTCTACAGTTCAAAATCTCAGAGACTGACAGTCTTGAGCCAAATACAGCCTTTTC
 AATTTTAAAGTTTGGAGAAACATGTACCACCAGTTTGTGCGACGCTCCATCCTCGGCAGTCTGTGCTGA
 GCATAATTATGAATATGAATGAGCAAAGCAAGCAGTTAGAGGAAGACATTAAGACCTCGAGGCTAAAAT
 TAAGCAATGCAAAAATGGCATCCTAACGAAGGAGTTGCTGCATGCTGTCCACCCTGAATCACCTGCCCTG
 AAAACCTCGCTGTGCTCAAAGAGCCGAGTCTGCTTCCCGTGAAGGACACACTCCGAGCTATAGAGGGCA
 GCAGCCAGCAGATAATCGCTACTGTGACTATGCCGAGGAATTTCTAAGTCGGAGCCTACCGTGGTCAG
 CTTGGAGTACGGGTGGCCAGAATGACTTGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR209453 protein sequence
 Red=Cloning site Green=Tags(s)

MEHIRTTKVEQVKLLDRFSTNNKSLTGLTYLTATHLLFIDAQQKETWILHHHIIASVEKLALTTSGCPLVI
 QCKNFRIVHFIVPRERDCHDIYNLLQLSKQAKYEDLYAFSYNPKQNDTERRNGWQLIDLAAEYERMGP
 NANWQLSDANREYKVCETYPREL YVPRTASRPVIVGSSNFRSKGRLPVL SYCRQGTEAII CRCSQPLSGF
 SARCLEDEHLLQAISKANPGNRYMYVVDTRPKLNAIANRAAGKGYENEDNYSNIRFQFVGIENIHVMRSS
 LQKLLLEVNGSKGLSVNDFYSGLESSGWLRIKAVLDAAI FLAKAIVVENASVLVHCSDGWDRTSQVCSLG
 SLLLDSSYYRTMKGMVLI EKDWISFGHKFSERCGHLDGDPREVPVFTQFLECVWHLTQQFPQAFEFNEA
 FLLQIHEHIHSCQFGNFLGNCQKEREELRLKEKTYSLWPFLLDDKKKYLNPLYSSKSQRLTVLEPNTASF
 NFKFWRNMYHQFDRTLHPRQSVLSIIMNMNEQSKQLEEDIKDLEAIKQCKNGILT KELLHAVHPESPAL
 KTSLSLKEPSLLPVKDTLRAIEGSSPADNRYCDYAEFSKSEPTVVSLEYGVARMTC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144843

ORF Size: 1854 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_144843.4](#)

RefSeq Size: 3845 bp

RefSeq ORF: 1854 bp

Locus ID: 219135

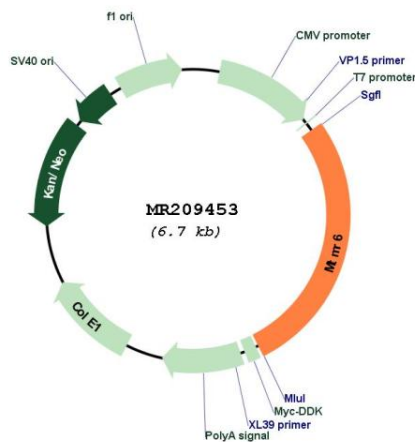
UniProt ID: [Q8VE11](#)

Cytogenetics: 14 D1

MW: 70.9 kDa

Gene Summary: Phosphatase that acts on lipids with a phosphoinositol headgroup. Dephosphorylates phosphatidylinositol 3-phosphate (PtdIns(3)P) and phosphatidylinositol 3,5-bisphosphate. Binds with high affinity to phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P₂) but also to phosphatidylinositol 3-phosphate (PtdIns(3)P), phosphatidylinositol 4-phosphate (PtdIns(4)P), and phosphatidylinositol 5-phosphate (PtdIns(5)P), phosphatidic acid and phosphatidylserine (By similarity). Negatively regulates ER-Golgi protein transport (By similarity). Probably in association with MTMR9, plays a role in the late stages of macropinocytosis by dephosphorylating phosphatidylinositol 3-phosphate in membrane ruffles (PubMed:24591580). Acts as a negative regulator of KCNN4/KCa3.1 channel activity in CD4(+) T-cells possibly by decreasing intracellular levels of phosphatidylinositol 3-phosphate. Negatively regulates proliferation of reactivated CD4(+) T-cells. In complex with MTMR9, negatively regulates DNA damage-induced apoptosis. The formation of the MTMR6-MTMR9 complex stabilizes both MTMR6 and MTMR9 protein levels (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209453