

Product datasheet for **RC214811**

MTMR2 (NM_201281) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTMR2 (NM_201281) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MTMR2
Synonyms:	CMT4B; CMT4B1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC214811 representing NM_201281
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGAACCACCCCTTGCTCCAGGAGAAAATATTAAGACATGGCCAAAGATGTAACCTATATATATGTC
 CATTCACTGGCGCTGTACGAGGAACTCTGACTGTACGAATTATAGGTTATATTTCAAAGCATGGAACG
 GGATCCCCCATTGTTTTAGATGCTTCCCTTGGTGTGATAAATAGAGTAGAAAAAATTGGTGGTCTTCT
 AGTCGAGGTGAAAATTCTTATGGACTAGAACTGTGTGAAGGATATTAGGAATTTACGATTTGCTCATA
 AACCTGAGGGGCGGACAAGAAGATCCATATTTGAGAATCTAATGAAATATGCATTTCTGTCTAATAA
 CCTGCCTCTTTTTGCTTTTTGAATACAAAGAAGTATCCCTGAAAATGGGTGGAAGCTATATGACCCTCTT
 TTAGAGTATAGAAGGCAGGGAATCCAATGAAAGCTGGAGAATAACAAAGATAAATGAACGATATGAAC
 TTTGTGATACATACCCTGCCCTCTGGTGTGCCAGCAAATATTCCTGATGAAGAATTAAGAGAGTGGC
 ATCCTTCAGATCAAGAGGCCGTATCCAGTTTTATCATGGATTATCCTGAAAGTCAAGCCACAATCACT
 CGGTGTAGCCAGCCCATGGTTGGAGTGAGTGAAAGCGAAGCAAAGAAGTGAATAATACCTTCAAGCTA
 TCATGGATTCCAATGCCAGTCTCACAAAATCTTTATATTTGATGCCCGCCAAGTGTAATGCTGTTGC
 CAACAAGGCAAAGGGTGGAGTTATGAAAGTGAAGATGCCTATCAAAATGCTGAACTAGTTTTCTGGAT
 ATCCACAATATTCATGTTATGAGAGAATCATTACGAAACTTAAGGAGATTGTGTACCCCAACATTGAGG
 AAACCCACTGGTGTCTAACTTGGAACTACTCATTGGCTAGAACATATTAAGCTTATTCTTGCAGGGGC
 TCTTAGGATTGCTGACAAGGTAGAGTCAGGGAAGACGTCGTGGTAGTGCATTGCAGTGATGGTTGGGAT
 CGCACAGCTCAGTCACTTCCCTGGCATGCTCATGTTGGATGGATACTATCGAACCATCCGAGGATTTG
 AAGTCTTGTGGAGAAAGAATGGCTAAGTTTTGGACATCGATTTCAACTAAGAGTTGGCCATGGAGATAA
 GAACCATGCAGATGCAGACAGATCGCCTGTTTTCTTCAATTTATTGACTGTGCTGGCAGATGACAAGA
 CAGTTTTCTACCCATTTGAATCAATGAGTATTTTCTATTACCATTTGGACCACCTATTACAGCTGCT
 TATTCGGAACATTCCTCTGTAATAGTGAACAACAGAGAGGAAAAGAGAATCTTCTAAAAGGACTGTGTC
 ACTGTGGTCTTACATAAACAGCCAGCTGGAAGACTTCACTAATCCTCTCTATGGGAGCTATTCCAATCAT
 GTCCTTTATCCAGTAGCCAGCATGCGCCACCTAGAGCTCTGGTGGGATATTACATAAGGTGGAATCCAC
 GGATGAAACCACAGAACCTATTCACAACAGATACAAAGAAGTCTTGTAAACGAGCAGAGCTTCAGAA
 AAAAGTAGAGGAACTACAGAGAGAGATTTCTAACCGATCAACCTCATCTCAGAGAGAGCCAGCTCTCT
 GCACAGTGTGCTACTCTGTCCAACTGTTGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214811 representing NM_201281
 Red=Cloning site Green=Tags(s)

MEEPPLLPGENIKDMAKDVTYICPFTGAVRGLTVTNYRLYFKSMERDPPFVLDASLGVINRVEKIGGAS
 SRGENSYGLETVCKDIRNLRFAHKPEGTRRSIFENLMKYAFPVSNLPLFAFEYKEVFPENGWKLVDPL
 LEYRRQGIIPNESWRITKINERYELCDTYPALLVVPANIPDEELKRVASFRSRGRIPVLSWIHPESQATIT
 RCSQPMVGVSGKRSKEDEKYLQAIMDSNAQSHKIFIFDARPSVNAVANKAKGGGYESEDAYQNAELVFLD
 IHNIHVMRESLRKLKEIVYPNIEETHWLSNLESTHWLEHIKLIILAGALRIADKVESGKTSVVVHCSGDWD
 RTAQLTSLAMLMLDGYRTIRGFEVLVEKEWLSFGHRFQLRVGHGDKNHADADRSVFLQFIDCVWQMTR
 QFPTAFEFNEYFLITILDHLYSCLFGTFLCNSEQQRGKENLPKRTVSLWSYINSQLEDFTNPLYGYSYNSH
 VLYPVASMRHLELWVGYYIRWNPRMKPQEPINHRYKELLAKRAELQKKVEELQREISNRSTSSSERASSP
 AQCVPVQTVV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6157_c10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_201281

ORF Size: 1713 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_201281.3](#)

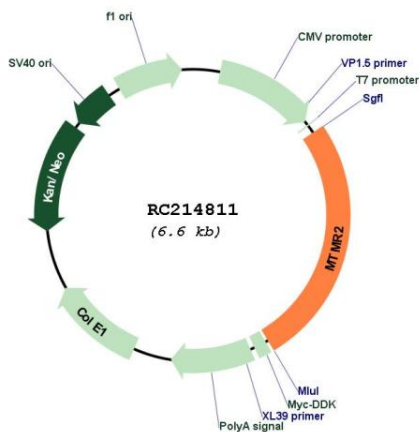
RefSeq Size: 4565 bp

RefSeq ORF: 1716 bp

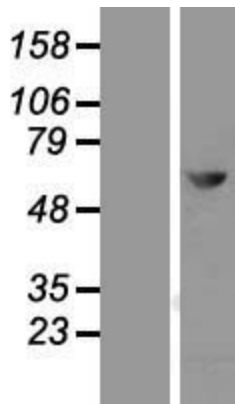
Locus ID: 8898

UniProt ID: [Q13614](#)
Cytogenetics: 11q21
Protein Families: Druggable Genome, Phosphatase
Protein Pathways: Fructose and mannose metabolism, Metabolic pathways, Riboflavin metabolism, Thiamine metabolism
MW: 65.8 kDa
Gene Summary: This gene is a member of the myotubularin family of phosphoinositide lipid phosphatases. The encoded protein possesses phosphatase activity towards phosphatidylinositol-3-phosphate and phosphatidylinositol-3,5-bisphosphate. Mutations in this gene are a cause of Charcot-Marie-Tooth disease type 4B, an autosomal recessive demyelinating neuropathy. Alternatively spliced transcript variants encoding multiple isoforms have been found for this gene. [provided by RefSeq, Aug 2011]

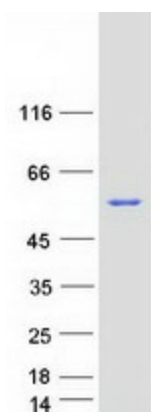
Product images:



Circular map for RC214811



Western blot validation of overexpression lysate (Cat# [LY404513]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214811 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MTMR2 protein (Cat# [TP314811]). The protein was produced from HEK293T cells transfected with MTMR2 cDNA clone (Cat# RC214811) using MegaTran 2.0 (Cat# [TT210002]).