

Product datasheet for **RG216461**

MTMR3 (NM_153050) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTMR3 (NM_153050) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MTMR3
Synonyms:	FYVE-DSP1; ZFYVE10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216461 representing NM_153050 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGAAGAGACTCGGCACAGCCTTGAGTGCATCCAGGCCAATCAGATCTTTCCAGGAAGCAGCTGA
TCCGGGAGGATGAGAATCTTCAGGTTCTTTCTTGAACCTTCATGGAGAGACACAGAGTTTGTGGGCCG
TGCCGAGGATGCCATCATTGCCCTTTCCAATTACAGACTTCACATCAAGTTCAAGGAGTCTCTTGTTAAT
GTTCCATTACAGCTTATAGAAAGTGTGAATGCCGAGATATATTCAGCTTCATTTGACTTGCAAAGACT
GCAAAGTTATCAGGTGTCAGTTTTCAACCTTTGAGCAGTGTCAAGAGTGGCTGAAGAGACTGAACAACGC
AATCCGACCACCTGCTAAAATAGAAGATCTCTTCTCATTTCATACCATGCTTGGTGCATGGAGGCTAT
GCCAGTGAAAAAGAGCAACATGGAGACCTGTGCAGACCAGGGGAGCATGTAACCTCAAGGTTAAAAACG
AGGTGGAGAGGATGGGTTTTGATATGAACAACGCCTGGAGGATTTCCAACATCAATGAGAAGTACAATT
ATGTGGTAGTATCCTCAAGAGCTCATAGTGCCTGCCGTCATCTACAGGCACCAGAGCAATGGAGCTGTCATTGCC
GCTGTGGACAGCCAGAGGTTAGCTGGTGGGGCTGGCGAAATGCAGATGATGAGCATCTGGTACAGTCAGT
AGCCAAAGCTTGTGCCTCTGACTCCCGATCGAGTGGCAGCAAGCTGTCAACTAGGAACACTTCTCGAGAC
TTTCCAAATGGGGAGACCTTTCTGACGTGGAGTTCGATTTCTTCTGTCAAATGCTTCAGGAGCAGAGA
GTTTAGCCATCCAACCGCAGAAGCTTTTGATCTTGGATGCAGCTCCATATGCAGCTGCTGTGGCAAACCG
AGCCAAAGGAGGAGGCTGCGAATGCCAGAGTATTACCCAAACTGTGAAGTTGTGTTTATGGGGATGGCA
AACATTATTCTATTCGAGGAGTTTTAGTCTCTGCGGTTGCTGTGCACTCAGATGCCAGATCCGGGAA
ATTGGCTATCAGCTCTTGAAGCACAAAATGGCTCCATCACTTGCTGTGCTTCTGAAATCAGCGCTTCT
GGTAGTGCATGCTGTGGATCAGGATCAGCGCCGGTGCTAGTACACTGCTCAGATGGCTGGGACCGCACC
CCCCAGATTGTGGCATTGGCTAAGCTCTTGTGGACCCTTATTACCGAACCATAGAGGGTTTCCAGGTCC
TCGTGAAATGGAGTGGCTGGATTTTGGCCATAAATTTGCTGACCGGTGTGGTTCATGGGAGAAGCTCGGA
TGATCTGAATGAACGTTGCCAGTGTCTGCAGTGGCTTACTGTGTTTCATCAGCTTCAGAGGCAATTT



[View online »](#)

CCTTGCTCTTTGAGTTCAATGAAGCATTCCCTGTGAAACTGGTGCAGCATACCTATTCCTGCCTGTTTG
GAACATTCCTGTGCAACAACGCCAAGGAGAGAGGGGAAAAGCATACTCAGGAACGGACATGTTCCGTGTG
GTCACTTCTTCGGGCAGGCAACAAGGCTTTCAAAAACCTACTGTATTCTCTCAGTCAGAAGCCGTGCTG
TACCCTGTGTGCCATGTGCGTAACCTGATGCTGTGGAGTGCAGTGTACCTGCCCTGCCATCCCCAACCA
CCCCTGTGGACGACAGCTGTGCACCATACCCAGCCCCAGGCCAGCCCTGATGATCCCCCCTGAGCCG
GCTACCAAAGACTAGATCATACGACAATCTGACCACAGCCTGTGACAACACAGTGCCCTCTGGCCAGCCGG
CGCTGCAGCGACCCAGCCTGAACGAGAAGTGGCAGGAGCACCGGCGCTCACTAGAGCTGAGCAGCCTGG
CTGGCCCTGGAGAGGATCCCCTTTCTGCCGACAGCCTAGGGAAGCCCACCAGAGTGCCGGGGGTGCCGA
GCTTTCTGTTGCAGCCGAGTAGCTGAGGGCAGATGGAGAACATCTTGCAGGAGGCCACCAAAGAGGAG
AGTGGAGTAGAGGAACCTGCCACAGGGCAGGCATTGAGATACAGGAGGGTAAAGAGGACCTCTCTTAG
AAAAGGAGAGCAGGAGGAAGACACCTGAGGCTCAGCCATTGGACTTCACCAAGACCCAGAAGTGGGTGA
TGCTGCTCTGAGGAGCCATCTGGATATGAGCTGGCCTCTGTTCTCACAGGGCATTCTGAACAGCAGAGT
GGGCTCAGTGTCTCCTCAGTCTCTCCAGGTCCCCCAGGGGAGAGGATTCCCTGGAGGTCCCTGTGG
AGCAGTTTCGAATAGAAGAGATTGCAGAGGGTAGGGAGGAAGCAGTCTTCCAATCCCAGTAGATGCAAA
AGTTGGCTATGGTACCTCACAGTCATGTTCTCTGTACCTTCCAAGTCCCTTTGAGACCAGAGGACCA
AACGTGGACAGTTCTACAGACATGTTAGTGAAGATAAGGTGAAGTCAGTAAGTGGGCCCAAGGTCATC
ATAGATCTTGCCCTGTAATAGTGGCAAGGACAGGCTTCCCTCAGACCATGGAACCCAGCCCTTCAGAGAC
AAGCCTGGTCGAGAGGCCCAAGTGGGGTCTGTGGTGCATAGGACTTCCCTTGGCAGCACTCTCAGCCTG
ACACGTTCCCCTGTGCCTTGCCCTTAGCCGAATGTAAGAGGGGCTTGTGTGCAATGGTGCCCCAGAGA
CTGAAAACAGGGCCTCAGAGCAGCCCCAGGTCTTAGCACCTCCAGATGTACCCACACCCAATGGGCA
TTGCGCCAATGGGGAGGCTGGTAGGAGCAAGGACTCACTGAGCCGTCAGCTGTCTGCTATGAGCTGCAGC
TCTGCCACTTACACTCAAGGAACCTGCACCACAAGTGGCTGCATAGCCACTCAGGAAGGCCATCTGCAA
CCAGCAGCCCCGACCAGCCTTCCCGCAGCCACCTGGACGATGATGGCATGTCAGTGTACACAGACACGAT
CCAACAGCCCTGCGTCAGATTGAGTCAGGCCACCAGCAGGAAGTAGAACTTTGAAGAAACAAGTCCAG
GAGCTGAAGAGTCGCTGGAGAGCCAGTACCTGACCAGCTCCCTACACTTAAATGGAGACTTTGGGGATG
AGGTGATGACCCGTTGGCTTCTGACCACCTGGCCGCCACTGCTATGCGTGCAGACAGTGCCTTCTGGCT
TGCCAGCAGGAAGCACCCTGCAGGGACACTGACCGTGTGATCAAACGTGGAATTGTGGGAACGTATTC
TGCTCCAGTTGTTGTAACCAGAAGGTTCCAGTCCCAGCCAGCAGCTCTTTGAACCCAGTCGAGTATGCA
AGTCTTGCTATAGCAGCCTACATCCACAAGCTCCAGCATTGACCTTGAAGTGGATAAGCCATTGCTGC
CACTTCCAAC

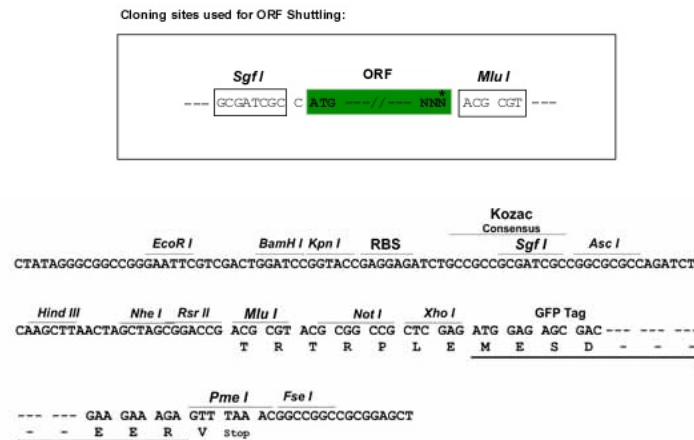
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

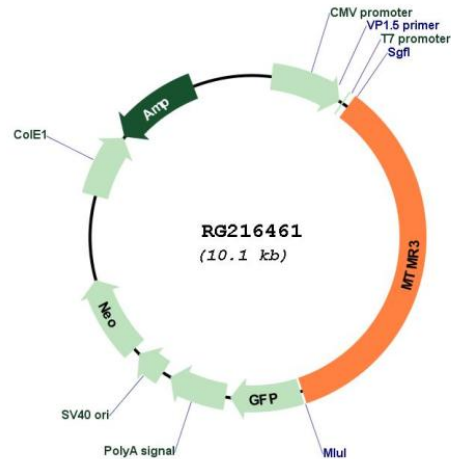
Protein Sequence: >RG216461 representing NM_153050
 Red=Cloning site Green=Tags(s)

MDEETRHSLECIQANQIFPRKQLIREDENLQVPFLELHGESTEFVGRAEDAIIALSNYRLHIKFKESLVN
 VPLQLIESVECRDIFQLHLTKDCKVIRCQFSTFEQCQEWLKRLLNNAIRPPAKIEDLFSFAYHAWCMEVY
 ASEKEQHGDLCRPGEHVTSRFKNEVERMGFDMNNAWRISNINEKYKLCGSYPQELIVPAWITDKELESVS
 SFRSWKRIPAVIYRHQSNGAVIARCGQPEVSWWGWNRADDEHLVQSVAKACASDRSSGSKLSTRNTRSD
 FPNGGDLSDVEFDSSLSNASGAESLAIQPQKLLILDARSYAAAVANRAKGGGCECEPEYYPNCEVVFMGMA
 NIHSIRRSFQSLRLLCTQMPDPGNWLSALESTKWLHLLSVLLKSALLVVHAVDQDQRPVLVHCSDGWDRD
 PQIVALAKLLLDPPYRTIEGFQVLVEMEWLDFGHKFADRCGHGENSDDLNERCPVFLQWLDVHQLQRQF
 PCSFEFNEAFLVKLVQHTYSCLFGTFLCNAKERGEKHTQERTCSVWSSLRAGNAFKNLLYSSSQSEAVL
 YPVCHVRNLMLWSAVYLPSPPTPVDDSCAPYPAPGTSPDDPPLSRLPKTRSYDNLTTACDNTVPLASR
 RCDPSLNEKWEHRSLELSSLAGPGEDPLSADSLGKPTRVPGGAELVAAGVAEGQMENILQEATKEE
 SGVEEPAHRAGIEIQEGKEDPILLEKESRRKTPEASAIGLHQDPELGAALRSHLDMSWPLFSQGISSEQQS
 GLSVLLSSLQVPPRGEDSLEVPVEQFRIEEIAEGREEAVLPIPVDAKVGYGTSQSCSLLPSQVPFETRGP
 NVDSSTDMLVEDKVKS SVSGPQGHRSCLVNSGKDRLPQTMESPSETSLVERPQVGSVVHRTSLGSTLSL
 TRSPCALPLAECKEGLVCNGAPETENRASEQPGLSTLQMYPTPNHGCHANGEAGRSKDSLRSQLSAMSCS
 SAHLHSRNLHHKWLHSHSGRPSATSSPDQPSRSHLDDDGMVYTDTIQQRLRQIESGHQEQVETLKKQVQ
 ELKSRLESQYLTSSLHFNGDFGDEVMTRWLPDHLAAHCYACDSAFWLASRKHCRDTRVDQTWNCGNVF
 CSSCCNQKVPVPSQQLFEP SRVCKSCYSSSLHPTSSSIDLELDKPIAATS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
Cloning Scheme:



Plasmid Map:


ACCN: NM_153050

ORF Size: 3510 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_153050.2](#), [NP_694690.1](#)

RefSeq Size: 8924 bp

RefSeq ORF: 3513 bp

Locus ID: 8897

UniProt ID: [Q13615](#)

Cytogenetics: 22q12.2

Protein Families: Druggable Genome, Phosphatase

Gene Summary: This gene encodes a member of the myotubularin dual specificity protein phosphatase gene family. The encoded protein is structurally similar to myotubularin but in addition contains a FYVE domain and an N-terminal PH-GRAM domain. The protein can self-associate and also form heteromers with another myotubularin related protein. The protein binds to phosphoinositide lipids through the PH-GRAM domain, and can hydrolyze phosphatidylinositol(3)-phosphate and phosphatidylinositol(3,5)-biphosphate in vitro. The encoded protein has been observed to have a perinuclear, possibly membrane-bound, distribution in cells, but it has also been found free in the cytoplasm. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]