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Product datasheet for RG222287

MTMR3 (NM_021090) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTMR3 (NM_021090) 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:

>RG222287 representing NM_021090
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATGAAGAGACTCGGCACAGCCTTGAGTGCATCCAGGCCAATCAGATCTTTCCCAGGAAGCAGCTGA
TCCGGGAGGATGAGAATCTTCAGGTTCCTTTCCTTGAACTTCATGGAGAGAGCACAGAGTTTGTGGGCCG
TGCCGAGGATGCCATCATTGCCCTTTCCAATTACAGACTTCACATCAAGTTCAAGGAGTCTCTTGTTAAT
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CCTTGCTCTTTTGAGTTCAATGAAGCATTCCTTGTGAAACTGGTGCAGCATACCTATTCCTGCCTGTTTG
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GTGGGAACGTATTCTGCTCCAGTTGTTGTAACCAGAAGGTTCCAGTTCCCAGCCAGCAGCTCTTTGAACC
CAGTCGAGTATGCAAGTCTTGCTATAGCAGCCTACATCCCACAAGCTCCAGCATTGACCTTGAACTGGAT
AAGCCCATTGCTGCCACTTCCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG222287 representing NM_021090
Red=Cloning site Green=Tags(s)

MDEETRHSLECIQANQIFPRKQLIREDENLQVPFLELHGESTEFVGRAEDAIIALSNYRLHIKFKESLVN
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SFRSWKRIPAVIYRHQSNGAVIARCGQPEVSWWGWRNADDEHLVQSVAKACASDSRSSGSKLSTRNTSRD
FPNGGDLSDVEFDSSLSNASGAESLAIQPQKLLILDARSYAAAVANRAKGGGCECPEYYPNCEVVFMGMA
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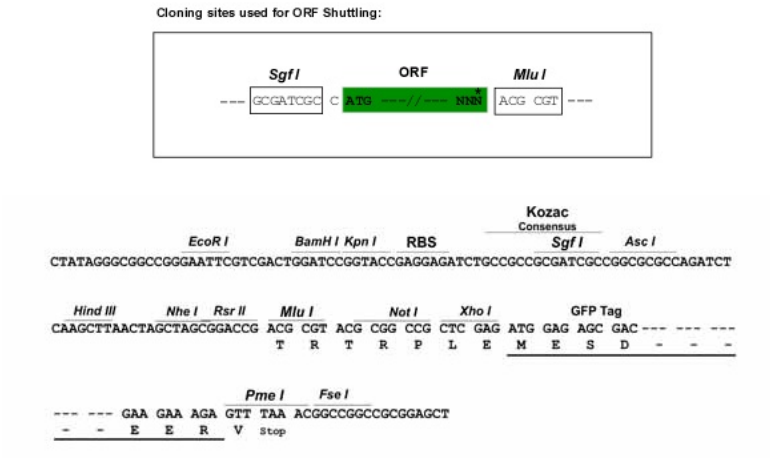
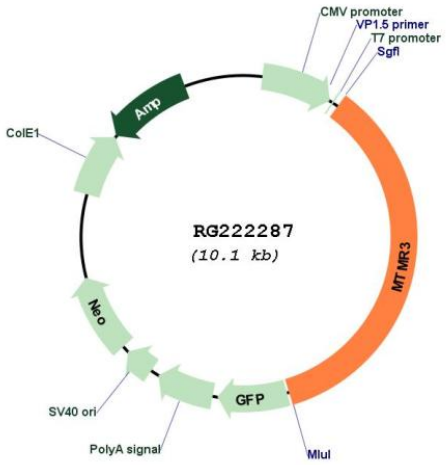
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_021090

ORF Size: 3594 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_021090.4
RefSeq Size:	5963 bp
RefSeq ORF:	3597 bp
Locus ID:	8897
UniProt ID:	Q13615
Cytogenetics:	22q12.2
Domains:	FYVE, PTPc_motif
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]