

## Product datasheet for SC111723

### MTMR3 (NM\_021090) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MTMR3 (NM_021090) Human Untagged Clone
Tag:	Tag Free
Symbol:	MTMR3
Synonyms:	FYVE-DSP1; ZFYVE10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_021090, the custom clone sequence may differ by one or more nucleotides

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ATGGATGAAGAGACTCGGCACAGCCTTGAGTGCATCCAGGCCAATCAGATCTTCCAGGAAGCAGCTGA
TCCGGGAGGATGAGAATCTTCAGGTTCCCTTGAACCTTCATGGAGAGACACAGAGTTGTGGGCCG
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AGGTGGAGAGGATGGGTTTTGATATGAACAACGCCTGGAGGATTTCCAACATCAATGAGAAGTACAATT
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GTCACCTCTTCGGGCAGGCAACAAGGCTTTCAAAAACCTACTGTATTCTCTCAGTCAGAAGCCGTGCTG  
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 CAGTCGAGTATGCAAGTCTTGTATAGCAGCCTACATCCACAAGCTCCAGCATTGACCTTGAAGTGGAT  
 AAGCCATTGCTGCCACTTCAACTGA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_021090 unedited  
 GCGGAGTAGCAGCCGGACGAGACGTCCCAGCGGCTCAGGCCTGCCAGCGCCGGCCCTG  
 GCAGGGAGCCTGGTGGGGTGGCGGAGGGGAGACTGTGCCGTGGAGGGCCTCGCCATGTC  
 CTGCTGCCCGACTTCTTGTGAAACCTCCTAGTAGAAAAAGTTCTTGGGACAACTTCAT  
 TTGACTTACCATAAGGGAAAGAAGAGAGCCTTGTGGACTGAAGAAGGGACGGGGAT  
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 ATCCAGGCCAATCAGATCTTCCAGGAAGCAGCTGATCCGGGAGGATGAGAATCTTCAG  
 GTTCCTTTCCCTTGAACCTCATGGAGAGACAGAGTTTTGTGGCCGTGCCGAGGATGCC  
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 CATTACAGCTTATAGAAAGTGTGAAATGCCGAGATATATTTAGCTTTTCAATTTGACTTG  
 CAAAGACTGCAAAGTTATCAGGTGTCAGTTTTTACCCTTTGACCCTGCCAAGAGTGGCT  
 GAAAGACTGAACAACGCAATCCCACCACCTGCTAAAATAAAAAGAAGTCTTCTTCAAT  
 TGCATTACCACTGCTTGGGTGCATTGCAAGGCCTATGTCCAGGGAAAAAAGACCAACATG  
 GCAAACCTGGTGCACCACAACGGAAACATGTCAACTTCCAGGTTCAAAAACACAGGCCGGA  
 TAAAGATAGGGTTTTGTATTTAACCCACCCTGGCAGTTTTCCAC

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_021090 unedited NAAGACCTACTTGAACCGCGCCGCAATCTAGATCGAGNCCTTTTTTTTTTTTTTTTTTTTTTTTT TTTGGCAGCAAATGCTACCATGTGGGAACTCAACTTTATTTGCTTTATTTATATATTTA ACAATTTAAAGTATTTACTTCTTGCTTTGACAAAAATGAAAAATATAGGAGCACTGAC TGACTCCTCTTTAGGAGAAAAGGGTTATATGTACAGCTATGGAGAGTTACGGGTCCTCCT TTAACAAAGGAAAATATTAATAAAAAAGTGCTTCATCGATCAAAAAGAGCTAAGAGCTG CAAGCATTTATTTACACCTGTACATCAGACCCAAGAAACCGTATCATAACCTTTTGGCA CCGTCCCAGGAAATGCACAATCCTCTATTCCCAACCACTTTTTCCCTACCTGCCCGC ACCTATCATGACACCAGAAATGTGGGTAAAAAACTACACCCTGTTGACACCACCGGTAAT TGAGTTGCCCTTGCAAATCGAAAACCTGCCCTCAACCCTCTGGGCTTTCCGGTGAAGTGA AAACCCGGTCACCTCCTGGACCCCTCGGGCCCCAGCCTTTGCCCTGCCCTTTG TACGGCCCCGCTGCCCTTGGTTAGTTGTGCGCGTCTTGCCCTTCTCTTTCAGTCTC TTTCCCGTCCCCCCTCCTGCCCTTCTCCCCCGTTGCCGCTCTCGCGACTT CGCTCTCCGCTAATGATTCTCCCCCGCATATACGTTTTCCACTCCTTTCCCCCTGAA TAACCCTCCCCCTGCTAGTCGCTCTGCGCCCCGATCCGCCCCGTATCTCGTGGTCTG CCCCCCTNCCTCCAACCATATTCTACGCTTCGCTCCCGGTATGCTGCGTTAATCACG CGTGCTGCCGCAN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_021090
<b>Insert Size:</b>	5700 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_021090.2</a> , <a href="#">NP_066576.1</a>
<b>RefSeq Size:</b>	5963 bp

RefSeq ORF:	3597 bp
Locus ID:	8897
UniProt ID:	<a href="#">Q13615</a>
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]

Transcript Variant: This variant (3) is the longest transcript and encodes the longest isoform (c). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.