

## Product datasheet for MR205958

### Mcat (NM\_001030014) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Mcat (NM\_001030014) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Mcat  
**Synonyms:** AI225907; BC025519  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR205958 representing NM\_001030014  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGAGCGCTCGGTAGCTCGGGCCGGTGGCCTGGCGCTCCTGGGGCCGCCGCGCCGCTCGAGCCTCC  
 GGGAGCCGCCCGGACCGCTGGACGTGGCGGAGCTGCTGCGGGACTCCAGCGTGGCCGAGGAGGGAGC  
 CCAGGAGCGGTGGCGCGCGCGGCCACCTTCACAGTGTCCGTGTTGCTTTCCCGGCCAGGGCTGC  
 CAGGCGGTGGCATGGGAGCGGCTGTCCACCTCCCGGTGTGCGGCAGCTCTACGAGGCCGCGCACC  
 GGGTACTGGGCTACGATCTGCTGGAGCTGTGCCTGCGGGGCCCCAGGAGGACCTGGACCGCACAGTGCA  
 TTGCCAGCCCGCGTCTTTGTGGCTTCACTGGCCGCCGTGGAGAAGCTACATCATCTGCAGCCGGCGGT  
 ATCGCAACTGTGTTGCTGCGGCTGGCTTCAGTGTGGGAGAGTTTGTGCCTTGGTATTTGCTGGAGCCA  
 TGGATTTTTCTGAAGTCTGTATGCGGTGAAGGCCGTGCCGAAGCTATGCAAGAAGCATCCGAAGCCGT  
 TCCAGTGGGATGCTGTCTGTCTTGGCCAGCGTCAGTCCAACCTTCTCCTTGTCTTGGGAGCCAG  
 GAGCACTGCAAGTCTTTGGGTATAGAGAACCCAGTGTGCCAGGTGTCCAACCTACCTTTCTGACTGCA  
 GGGTCACTCAGGACACCTTGGGCCCTCAGTTTCTCCGGAGGAATTCTGCTAAGTATCACTTCCGGCG  
 CACCAAGATGCTGCCTGTAAGTGGAGGCTTCCATACCTGCCTCATGGAGCCAGCCGTGGATCCCCGATG  
 AAAGTTCTAGGCTCGATCAACATCAAGAAGCCACTGGTTGCCGTCATTCCAATGTCAGTGGGCAGAA  
 ACACATCCACAACACATCCGAAAGCTGCTAGGGCAGCAGGTGGTGTGCCAGTAAAATGGGAACAGAC  
 AATGCACTCTATCTACGAGCGGAAAGAAAGGCATGGAGTTCACCGAGCACCTACGAGGTGGGCCCGGCGAG  
 CAGCTGGGAAGCATCCTCAAGTGTGCAACAGGCAGGCGTGAAGTCTACAGCCATGTGGATGTGATGC  
 AGAACATCATGGATCCTGACCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205958 representing NM\_001030014  
 Red=Cloning site Green=Tags(s)

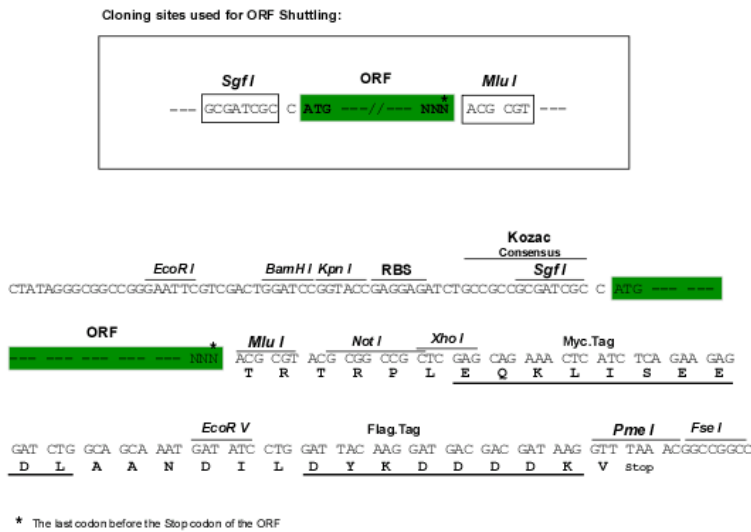
MSARVARAGWAWRSWGRRAASSLREPPDAVDVAELLRDSSVAEEGAQEAVARRRPPSQCSVLLFPGQGC  
 QAVGMGSGLLHLPRVRQLYEAHRVLYDLELCLRGPQEDLDRTVHCQPAVFVASLAAVEKLHHLQPAV  
 IDNCVAAAAGF SVGEFAALVFAGAMDF SEGLYAVKARAEAMQEASEAVPSGMLSVLGQRQSNFSFACLEAQ  
 EHCKSLGIENPVCQVSNYLFPCRVISGHLEALQFLRRNSAKYHFRRTKMLPVSGGFHTCLMEPAVDPLM  
 KVLGSIINIKKPLVAVHSNVSGQKYTHPQHIRKLLGQQVVSPVKWEQTMHSIYERKKGMEFPSTYEVGPGQ  
 QLGSIKCCNRQAWKSYSYSHVDVMQIMDPDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9092\\_a10.zip](https://cdn.origene.com/chromatograms/mm9092_a10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001030014

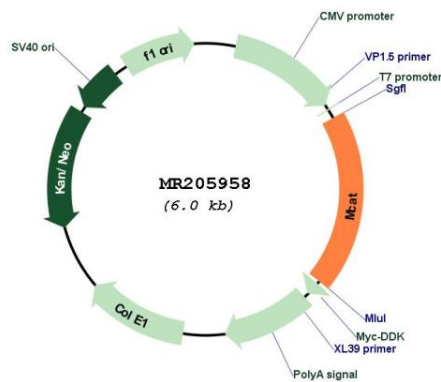
**ORF Size:** 1143 bp

**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](mailto: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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>	<u><a href="#">NM_001030014.2</a></u> , <u><a href="#">NP_001025185.1</a></u>
<b>RefSeq Size:</b>	1893 bp
<b>RefSeq ORF:</b>	1146 bp
<b>Locus ID:</b>	223722
<b>UniProt ID:</b>	<u><a href="#">Q8R3F5</a></u>
<b>Cytogenetics:</b>	15 E1
<b>MW:</b>	41.9 kDa
<b>Gene Summary:</b>	Catalyzes the transfer of a malonyl moiety from malonyl-CoA to the free thiol group of the phosphopantetheine arm of the mitochondrial ACP protein (NDUFAB1). This suggests the existence of the biosynthesis of fatty acids in mitochondria (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR205958