

## Product datasheet for MR205222

### Ghitm (NM\_078478) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ghitm (NM_078478) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ghitm
Synonyms:	1010001P14Rik; C77840; MICS1; PTD010; Tmbim5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205222 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTGGCTGCAAGGCTTGTGTCTCCGGACTACCTCCAGGGTTTTCCAGCCCACTTTCATCACCA  
AGGCTCTCCACTTGTGAAGAATCCATCACAAGAACCAATGGCTCGTAACACCCAGCAGGAATATGC  
TACCAAGACAAGAATTAGGACTCACCGTGGGAAAAGTGGACAAGAAGTAAAGAGGCAGCCTTGAACCA  
TCAATGGAAAAATCTTTAAAATCGATCAAATGGGAAGGTGGTTTGTGCTGGAGGAGCAGCTGTTGGTC  
TTGGAGCGCTCTGCTACTATGGCTTGGGAATGTCTAATGAGATTGGAGCTATCGAAAAGGCTGTAATTTG  
GCCTCAGTATGTAAGGATAGAATTCATTCTACTTACATGACTTAGCAGGAAGTATTGGTTAACAGCT  
TTGCTGCCTTGGCAGTAGCCAGAACACCTGCTCTCATGAACTTCATGATGACAGGCTCTTGGGTGACAA  
TTGGTGCAACCTTTCAGCCATGATTGGAGCTGGAATGCTTGTACTCAATATCATATGAGCAGAGCCC  
AGGCCAAAGCATCTGGCTTGGATGCTGCATTCTGGTGTGATGGGTGCAGTTGTGGCTCCTCTGACGATC  
TTAGGGGGCCCTCTCTCCTGAGAGCCGCATGGTACACCGCTGGTATTGTGGGAGCCTCTCTACTGTGG  
CCATGTGTGCACCTAGTGAAGTTTCTGAACATGGGAGCACCCCTGGGAGTGGGCTGGGTCTTGTCTT  
TGCGTCTTCTCTGGGTCTATGTTTCTTCCCCCTACCTCTGTGGCTGGTCCACTCTGTACTCAGTGGCA  
ATGTATGGTGGATTAGTTCTTTTAGCATGTTCTTCTGTATGATACTCAGAAAGTAAACAAACGTGCAG  
AAATAACACCCATGTATGGAGCTCAAAAGTATGATCCCATCAATTCGATGTTGACAACTACATGGATAC  
ATTAATATATTTATGCGAGTTGCAACTATGCTAGCAACTGGAAGCAACAGAAAGAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205222 protein sequence  
 Red=Cloning site Green=Tags(s)

MLAARLVCLRTLPSRVFQPTFFITKASPLVKNSITKNQWLVTPSREYATKTRIRTHRGKTGQELKEAALEP  
 SMEKIFKIDQMGRWFVAGGAAVGLGALCYGLGMSNEIGAIEKAVIWPQYVKDRIHSTYMYLAGSIGLTA  
 LSALAVARTPALMNFMMTGSWVTIGATFAAMIGAGMLVHSISYEQSPGPKHLAWMLHSGVMGAVVAPLTI  
 LGGPLLLRAAWYTAGIVGGLSTVAMCAPSEKFLNMGAPLGVGLGLVFASSLGSMFLPPTS VAGATLYSVA  
 MYGGLVLF SMFLLYDTQKVIKRAEITPMYGAQKYDPINSMLTIYMDTLNIFMRVATMLATGSNRKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_078478

**ORF Size:** 1041 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](#)

**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\\_078478.1](#), [NM\\_078478.2](#), [NM\\_078478.3](#), [NM\\_078478.4](#), [NM\\_078478.5](#), [NP\\_510963.1](#)

**RefSeq Size:** 2906 bp

**RefSeq ORF:** 1041 bp

**Locus ID:** 66092

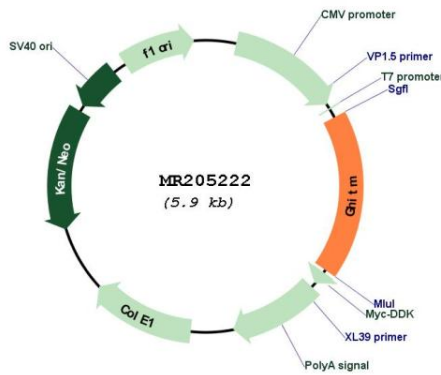
**UniProt ID:** [Q91VC9](#)

**Cytogenetics:** 14 21.29 cM

**MW:** 37.3 kDa

**Gene Summary:** Required for the mitochondrial tubular network and cristae organization. Involved in apoptotic release of cytochrome c (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR205222