

Product datasheet for **MG208350**

Oma1 (NM_025909) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Oma1 (NM_025909) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Oma1
Synonyms:	2010001O09Rik; MPRP-1; ZMPOMA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208350 representing NM_025909
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCCTCCTTTATGGACTGCAGTCTACCAGGATAAATCGGTTTCTCTCTGGAGTGAATAACCTGGCCA
 ACAGGAGACAGTGGACCCCCAGCAAGCTGTCCACTGGCACAAAGCTCCGAGCAGTAAATGCATACTG
 GGGACTGAACACAGTCACTCATTGTCATTCACTGACCTTACTGCCTAGAACTTTCTTTTCTGTAGGACT
 CTCAATCACAAAAATCAAGATGCCCTCTCAAGTGCCAAAGCAAGGAATTGGGGGTCTTACCTACAGAT
 GTACTGTGCGGGGTATTCTGTTCTAAGACAAGGAGCAAGGAAAGTGGCTGGCGTTCTGCTCTCGCGGC
 CTCCTGTTCTCAAGCTGTCTGCCGTAATAGAGGCCCGGAGTTCCGTACATCTGCAAGGGTTCAGGCT
 GCCCAGTCCCTCTTGTGCTCATTCTGAAGCCAGTGCAAAAGCTCCTTGCTATCATCGTGGCAGGG
 GCATAAGGAAATGGTGGCAAGCACTTCCCCTAACAAGAAGGAGCTATTTAAAGACAGCGTGAGGAAGAA
 CAAGTGGCGGCTGCTTCTTGGTCTGAGTGCATTTGGACTGCTTTGTAGTGTTTTATTTCACTCACCTG
 GAAGTGAGCCCTGTCACCGGAAGGAGTAACTACTGTTAGTGGGCAAAGAACACTCCGACTTCTGTGAG
 ACCTGGAATATGAAGTATGGATGGAAGAATTTAAGAACGATCTGCTGCCTGAGAGAGACCCCGCTACCT
 GACTGTGAAAGAAATGGTTTATCATCTGACACAGTGAATCGAGACGTCACCGGGGATCTCGGAGACCAAC
 TGGGTGGTTATGTGGTACTCCCCAGCCGTCATGCCTTTGTGCTCCCAAATGGACAAGTGTATTTT
 TCACCGGGCTTCTGAATAGTGTGACGGAGTGCACCGAGTGTCTTCTCCTGGGCCATGAGATCGCACA
 CGCAGTCTGGGGCAGCCGAGAAAAGGCTAGCTTGGTTCATTTACTGGATTCCTTGGTATGATTTTT
 CTCACAATGATTTGGGCCATTTGTCCCCGAGACAGCTTGGCAGTTTTGGCCAGTGGATACAGTCAAAGT
 TGCAGGAGTACATGTTTGTATCGACCATAACAGTGAACATTTGGAGGCCGAAGCTGACAAAGTTGGATACA
 GCTGGCTGCAAAGGCATGTGCCGATGTAAGAGCTAGTTCAGTGTTTTGGCAGCAGATGGAGTTCTCAGAG
 AGTCTTATGGCTATCCCAAGTTGCCAGAGTGGCTGTGACACATCCTTCTCATGGGAACCGAGCTGAGT
 ACTTGGATAGACTCATACCACAGGCTCTCAAACCTCCGGGAGGTCTGCAATTGCCCGCCACTCTCTGGCCC
 AGACCCTCGGCTATTGTTCAAGGCTTACTGTGAAGCGTTTTCTTGAAGACTCGGAGAAAGAGGACCTAAAC
 ATCACTGTCAAAGCAGAAAACGGATGCTCTCCCATGCAGAAGCAGGAGCAGATACCCTGACGTATG
 TCCTAGAGAAGAGAAGTGCAGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208350 representing NM_025909
 Red=Cloning site Green=Tags(s)

MSLLYGLQSTRINRFLSGVNNLANRRQWTPPASCPLAPKLRAVNAYWGLNTVSHCHSVTLLPRNLF CRT
 LNHHKSRCLSSAQSKELGVLTYRCTVRGDSVLRQGARKVAGVPALAAASCPSPAVIEARSFRTSARVQA
 APVPLLLLILKPVQKLLAIIVGRGIRKWWQALPPNKELFKDSVRKNKWRLLGLSAFGLLFVVFYFTHL
 EVSPVTGRSKLLL VGKEHFRLSDLEYEVWMEEFKNDLLPERDPRYLTVKEMVYHLTQCNRDVPGISETN
 WVVHVVDSPAVNAFVLPNGQVFI FTGLLNSVTDVHQLSFLLGHEIAHAVLGHAAEKASLVHLLDFLGMIF
 LTMIIWAICPRDSLAVLGQWIQSKLQEYMFDRPYSRTLEAEADKVGLQLAAKACADVRASSVFQQMEFSE
 SLHGYPKLPPEWLSTHPSHGNAEYLDRLIPQALKLREVCNCPPLSGPDRLLFRLTVKRFLEDSEKEDLN
 ITVKKQKTDALPMQKQEQIPLTYVLEKRTAG

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_025909

ORF Size: 1563 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).

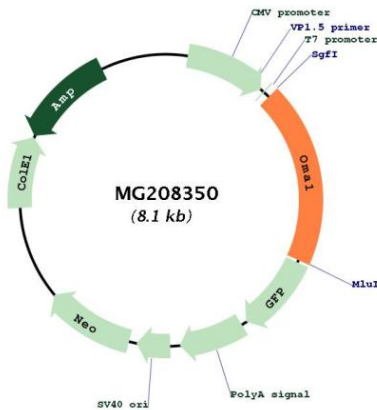
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_025909.3](#)

RefSeq Size: 1867 bp
 RefSeq ORF: 1566 bp
 Locus ID: 67013
 UniProt ID: [Q9D8H7](#)
 Cytogenetics: 4 C6

Gene Summary: Metalloprotease that is part of the quality control system in the inner membrane of mitochondria. Following stress conditions that induce loss of mitochondrial membrane potential, mediates cleavage of OPA1 at S1 position, leading to OPA1 inactivation and negative regulation of mitochondrial fusion (PubMed:22433842, PubMed:24616225, PubMed:26785494). May also cleave UQC3 under these conditions. Its role in mitochondrial quality control is essential for regulating lipid metabolism as well as to maintain body temperature and energy expenditure under cold-stress conditions.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG208350