

## Product datasheet for **MC205339**

### **Oma1 (NM\_025909) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Oma1 (NM_025909) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Oma1
Synonyms:	2010001O09Rik; MPRP-1; ZMPOMA1
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >BC016238  
 AGCAAAAGAAAGATGAGCCTCCTTTATGGACTGCAGTCTACCAGGATAAATCGGTTTCTCTCTGGAGTGA  
 ATAACTGGCCAAACAGGAGACAGTGGACCCCCAGCAAGCTGTCCACTGGCACCAGCTCCGAGCAGT  
 AAATGCATACTGGGGACTGAACACAGTCAGTCAATTGTCATTTCAGTGACCTTACTGCCTAGAACTTTCTT  
 TTCTGTAGGACTCTCAATCACAAAAATCAAGATGCCTCTCAAGTGCCAAAGCAAGGAATTGGGGGTGC  
 TTACCTACAGATGACTGTGCGGGTGATTCTGTTCTAAGACAAGGAGCAAGGAAAGTGGCTACACTGCA  
 TGCTCTCGCGCCTCCTGTTCTCCAAGCTGTCCGCGTAATAGAGGCCGGAGTTCCGTACACTGCA  
 AGGGTTACAGGCTGCCCCAGTCCCTCTTGTCTGCTCATTCTGAAGCCAGTGCAAAAGCTCCTTGCTATCA  
 TCGTGGGCAGGGGCATAAGGAAATGGTGCAAGCACTTCCCCCTAACAAGAAGGAGCTATTTAAAGACAG  
 CGTGAGGAAGAACAAGTGGCGGTGCTTCTTGGTCTGAGTGCATTTGGACTGCTCTTTGAGTGTTTTAT  
 TTCCTCACCTGGAAGTGAAGTGTGACCCGGAAGGAGTAACTACTGTTAGTGGCAAAGAACACTTCC  
 GACTTCTGTGACAGCTGGAATATGAAGTATGGATGGAAGAATTTAAGAACGATCTGCTGCCTGAGAGAGA  
 CCCCCGCTACCTGACTGTGAAAGAAATGGTTTATCATCTGACACAGTGAATCGAGACGTCCTGGGATC  
 TCGGAGACCAACTGGGTGGTTCATGTGGTTGACTCCCCAGCCGTCATGCCTTTGTCTCCCAAATGGAC  
 AAGTGTATTTTTACCAGGCTTCTGAATAGTGTGACGGACGTGCACCAGCTGCCTTCTCCTGGGCCA  
 TGAGATCGCACACGAGTCTGGGGCACCCGAGAAAAGGCTAGCTTGGTTCATTTACTGGATTTCCTT  
 GGTATGATTTTTCTCACAAATGATTTGGGCCATTTGCCCCGAGACAGCTTGGCAGTTTTGGGCCAGTGG  
 TACAGTCAAAGTTGCAGGAGTACATGTTTGATCGACCATACAGTAGAACATTGGAGGCCGAAGTGA  
 AGTTGGACTACAGCTGGCTGCAAGGCATGTGCCGATGTAAAGAGCTAGTTCAGTGTTTTGGCAGCAGATG  
 GAGTTCTCAGAGAGTCTTATGGCTATCCCAAGTTGCCAGAGTGGCTGTGACACATCCTTCTCATGGGA  
 ACCGAGCTGAGTACTTGGATAGACTCATACCACAGGCTCTCAAACCTCCGGGAGGTCTGCAATTGCCCGC  
 ACTCTCTGGCCCAGACCCTCGGCTATTGTTTCAGGCTTACTGTGAAGCGTTTTCTGAAGACTCGGAGAAA  
 GAGGACCTAAACATCACTGTCAAAAAGCAGAAAACGGATGCTCTCCCATGCAGAAGCAGGAGCAGATAC  
 CACTGACGTATGCTTAGAGAAGAGAAGTGCAGGCTGAACGGAAGTGGTGAATCGTGGGTCCTGAGC  
 AGCACAGTGGACCTTTCTTATTACGCAACTTTTAAAAATGATGTTTTCAAGGAAAAAAAAAAAAAAGT  
 GTTCAAAGGCCAAGTCACTTATATTATAGATATTCTGGATTTTTCTAGTTTTTATCTTTCATGAAAT  
 ATTAATGTGTTTCCACCTATTTTAAAAACTGCCAATGAGGAAAACATCACAGAATAAATTGATATTATG  
 CATTTCAAAAAAAAAAAAAAAAA

**Restriction Sites:** RsrII-NotI

**ACCN:** NM\_025909

**Insert Size:** 1566 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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:** [BC016238](#), [AAH16238](#)

RefSeq Size: 1841 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 UQCC3 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]