

## Product datasheet for **RN214961**

### **Oma1 (NM\_001106669) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Oma1 (NM_001106669) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Oma1
Synonyms:	RGD1304821
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >RN214961 representing NM\_001106669  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAACCTCCTTTATGGACTGCAGTCTGCCACAAGAAATCAGTTTCTCTCTGGAGTGAATACGCTGGCCC  
 GCAGGAGAACGTGGACCCACCAGCAGGCTGTCCACTGGCATCGAGGCTCCAGCAGTAAATGCAAACCTG  
 GGGACTTAGCACAGTCAGTCACTGTTATTCACTGATCTTACTGCCAGAAACCTTCATTTCTGTAGGACT  
 CTCAAGAACAAGATCAAGATGCCTCTCAAGTGCCAAAGCAAGGAAATGGGGGTGCTCACCTACAATT  
 GGACGGTTTGGGGTGATGCCTCATGTTCTCCGAATATGCCGCCATAAGAGAGGTCCGGAGTTTCCACAC  
 ATCTGCGCCACGTCAGGCCGCTCCAGTCCCTCTTTGATGCTCATTCTGAAACAGTGCAAAAGCTCCTT  
 GCTATCATTGTGGCAGGGGCATAAGGAAATGGTGGCAAGCACTCCCCCTGACAAGAAGGCGCTATTTA  
 AAGACAGCGTGAAGAGGAACAAGTGGAGGCTGCTCCTTGGTCTGAGTGCCTTTGGACTGCTGTTTGGT  
 GTTTTATTTCACTCACCTGGAAGTGAGCCCTGCTACTGGAAGGAGCAAACACTGTTAGTGGGAAAGAA  
 CACTTCAGACTCCTGTCAGACCTGGAATATGAAGTGTGGATGGAAGAGTTAAAAATGATCTGCTGCCTG  
 AGGAAGACCCCGGTACCTGACTGTCAAGAAGGTGGTTTATCATCTAACACAGTGAATCAAGATGTCCC  
 AGGGGTCTCTGAGATCAACTGGGTGGTTCACGTGGTCCATTTCGCCAAGGTCAATGCCTTCGTGCTTCCA  
 AACGGACAAGTGTGTTTCTCACTGGGCTTTGAAATAGCGTGACCGATATGCACCAGCTTTCCTTCTCCTC  
 TGGGCCATGAGATCGCGCATGCGGTCTGGGGCATGCCGAGAAAAGGCTAGCTTGGTTCATTTACTGGA  
 TTTCTTGGCATGATTTTCTCACAAATGATTTGGGCCATTTGTCCAAGAGACAGCTTGGCAGTCTGGGC  
 CAGTGGATACAGTCAAAGTTGCAGGAGTATATGTTTGTAGACCATACAGTAGAACATTGGAGCCGAAG  
 CTGACAAAATTGGACTACAGCTGGCTGCAAAGGCATGTGTGGACGTAAGAGCTAGTTCAGTGTGTTGGCA  
 GCAGATGGAGTTCTCAGAGAGCCTTCATGGCTACCCCAAGTTGCCAGAGTGGCTATCAACACATCCTTCT  
 CACGGGAACCGAGCTGAGTACTTGGACAGACTCATACCACAGGCTCTCAAACCTCGGGAGGTCTGTAAAT  
 GCCCACCCTCTCTGGACCAGACCCTCGGTTACTGTTCACTTACTGTGAAACATTTACTTGAAGACTC  
 CGAGAAAGAGGACCTAACATCACTGTCAAAGCAGAAACCGGATGCTCTGCCATTGAGAAGCAGGAG  
 CAGATACCCTGACATACGCACTGGGAAAAGAACTGCAGGT**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001106669
- Insert Size:** 1515 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:** [NM\\_001106669.1](#), [NP\\_001100139.1](#)

**RefSeq Size:** 1839 bp

**RefSeq ORF:** 1515 bp

**Locus ID:** 298282

**UniProt ID:** [D3ZS74](#)

**Cytogenetics:** 5q33

**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. 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]