

## Product datasheet for **RN211436**

### **Orc2 (NM\_001012003) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Orc2 (NM_001012003) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Orc2
Synonyms:	Orc2l
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN211436 representing NM\_001012003  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGAGCACACTGCGGTTAAAGGAAGCCAAGGTGCCAAGCGTTCAGTTTGTGGGAGATGACGATGTTCTTA  
GTCACATTCTGGATAGAGAAGGAGGAACAAATTAAGAAGGAGAAAGTTTCAGCTTTGGTCAATCCCCA  
GAAAGTAATAAAGAAGGCAGAATGTGAATTAGAGAAAAGTGACCTGGAAGTCTTAGAGGATCAGAACTAC  
GTGGAAGTCTTGGGAAGAAATATCAAGAATCCTTGGGAAATGGCTCTGCTGTAGATGGTAGGAATAAAG  
TTTATTCTTTCAACACAGAAAACACCCTGAAGAGATGACTAAATGGCTTTAGAAGTGGCAAAAACATC  
AGGAAAAATTGATCCACTTGCCCTCAAACGATCCTAAAATCACGAAAAACATTGCTCGAAAAAGCAAAGGG  
CATTCTTCAGAGAAAGCTCCGCTGGAGAACAATAACAAAAATGAATTTCCGTCAATACAACCTCATAATG  
TAAGAAAAAGATTAATAGCATCAAGGTCTCATTGTGACAGTGAAGTGAATATTCTGCTCCAGCTCAGA  
AGATGATGAAGAGGTTGCAAAAGACGATGAAGAAGACACTAATGTGGTCAGGTGCTCGAAAAAGAGTCAA  
GGTCAGAATAGACTACTTCCAGCTCCTGTTTCCAAGAGATACTGCCAAGAAAAGGAAGAGAGACAAAAG  
CAGGTGACTTGGTAGAAGAATATTTTGAAGCCACAGTAGTTCAAAAGTCTTAACGTCTGATAGAACGCT  
GCAGAAGCTGAGGAGAGCGAGAGTGGACCAGAAAACCTCTGCGTAACTTACTGAGCAAATTTGTGCCTTCC  
TTTTCTACTGAAATGGACAGTTGAATCAACAGCATGAGAGATTGTTGATAAGTGGATACTACAGTTAC  
GCCTTGGGTTCAACATTGTGCTTTATGGTTTGGGGTCTAAGAGAGATTTACTAGAAAAGTTTCGAACTAC  
CATGCTTCAAGATTCCATTATGTTGTCATCAACGGCTTCTTCCGTCATCAGTGTAAAATCAATCCTG  
AACTCTAACTGAAGATGTCCCTCAGTCACATGGGTACTTTCCAAAGTGTCTGGATCAGCGAGACTGGA  
TAATGAACAGATTTAAAGAAGATTCTTCTTTAGAAGTCTTCTTCTTATCCACAATTTGGATAGCCAGAT  
GTTAAGAGGAGACAATAGCCAGCAAATCTTGGACAGTTGTCATCCTTAGTAATGTGTATCTCATAGCA  
TCTATCGACCACCTCAATGCTCCTCTCATGTGGGATCATGCAAAGCAGAGTCTGTACAATTGGCTGTGGT  
ATGAAACCACTACATACAGTCCCTACACCGAAGAAACCTCCTATGAGAACTCCCTTTTGGTTAAACAGTC  
TGGATCTCTACCACTGAGTTCTCTGATTATGCTTACGAAGCCTTACACCCAATGCAAGGGGGATTTTC  
AGGCTACTTATGAAGTACCAACTGGATAACCAGGACTGCCCTTCTACATTGGACTTTCTTTTCAAGATT  
TTTACCAGCAGTGTGGGAAGCATTCTTGTAAACAGTATCTCACACTCCGAGCCAGTAACTGAATT  
TAGGGACCACAACTTATAAGAACGAAGAAGGAACTGATGGTGTGGAGTATTTATTAATCCTGTTGAC  
AGCGGAACATTGGCCGATTTCTTGGAGAAGGAGGAGGAGGAGTCTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001012003

**Insert Size:** 1731 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\\_001012003.1](#), [NP\\_001012003.1](#)

**RefSeq Size:** 1821 bp

**RefSeq ORF:** 1731 bp

**Locus ID:** 301430

**UniProt ID:** [Q75PQ8](#)

**Cytogenetics:** 9q31

**Gene Summary:** Component of the origin recognition complex (ORC) that binds origins of replication. DNA-binding is ATP-dependent. The specific DNA sequences that define origins of replication have not been identified yet. ORC is required to assemble the pre-replication complex necessary to initiate DNA replication (By similarity). Binds histone H3 and H4 trimethylation marks H3K9me3, H3K20me3 and H4K27me3. Stabilizes LRWD1, by protecting it from ubiquitin-mediated proteasomal degradation. Also stabilizes ORC3 (By similarity).[UniProtKB/Swiss-Prot Function]