

Product datasheet for **MR230564**

Orc2 (NM_001271526) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Orc2 (NM_001271526) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Orc2
Synonyms:	AU041563; Orc2l
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR230564 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGCACTCTGCAGTTAAAGGAAACCAAGGTGCCAAGCGTGCAGTTTGTGGGAGATGATGATGTTCTTA
 GTCACATTCTGGACAGAGAAGGAGGAACAAATTAAGAAGGAGAAAGCTCAGCTTTTGGTCAATCCCA
 GAAAGTAATAAGAAGGCAGACTGTGAGTTGGAGAAAAGTGACCTGGAAGTTTTAGAGGATCAGAACTAC
 GTGAAAGTCTTGGGAAGAAATATCAAGAATCCTTGGGAAACGGCTCTGCTAAAGATGGTAGGAATAAAG
 TTTATTCTTTCAACAAAGAAAGCACCTGAAGAGATGACTAAATGGCTTTAGAACTAGCAAAAACATC
 AGGAAAAAAGGATCCACTTGACTCAAATGATCCTGAAATCACAAAAACATTGCTCAAAAAAGTAAAGGG
 CATTCTACTTCAGAGAAAGCTCCACTGGTGAACAATAACAAAACCTGAATTTCTGTCAACACAACCTCATA
 ATCTAAGGAAAAGAATAATAGCGTCAAGGTCTCATTATGACAGTGAGAGTGAGTATTCTGCTCCAGCTC
 AGAGGATGATGAAGAGGCTACAAAAGACGAAGAAGAAGACTAATGTGGCCAGGCTCTCTCAGAAGAGT
 CAAGGTCAAGAATAGACTTCTCCAGCTCCTGTTTCCAAAGAGACTGCCTAAGAAAAAGAAAAGAGACA
 AAGCGAGTGACTTGGTAGAAGAATATTTGAAGCCCATAGTAGTTCAAAAGTCTTAACATCTGATCGAAC
 GCTGCAGAGGCTGAGGAGAGCCAGAGTGGATCAGAAAACCTCTGCATAACTTACTGAGAAAATTTGTGCC
 TCCTTTTCTGCTGAAATGAACGATTGAATCAACAGCATGAGAACTGTTTCATAAATGGATGCTTCAGT
 TACACCTTGGGTTCAACATTGTGCTTTATGGCTTGGGGTCCAAGAGAGATTTACTAGAAAAGTTTCGAAC
 CACCATGCTTCAAGATTCATTCATGTTGTCATCAACGGCTACTTCTGGCGTCAGTGTGAAATCAATC
 CTGAACCTATAACTGAAGATGCTCCTCAGTCATGTGGTACTTTCCAAAGTGTTCGGATCAGCGGGACT
 GGATAATAACAGATTTAAAGAAGATTCTTCTTAGAACTTTCCTTCTTATCCACAATTTGGATAGCCA
 AATGTTAAGAGGAGACAATAGCCAGCAAATCTTGGACAGTTGTATCATTACATAACGTGTATCTCATA
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 TTCAGGCTACTTATGAAGTTCAGCTGGATAACCAGGACAGCCCTTCTACATTGGACTTCTTTTCAAG
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 ATTTAGGGACCACAACTTATAAGAACAAGAAGGGAAGTATGTTGTAGAAATATTTATTAATTCCTGTT
 GACAGCGGAATATTGGCTGATTTCTTGGAGAAGGAAGAGGAGGAGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230564 protein sequence
 Red=Cloning site Green=Tags(s)

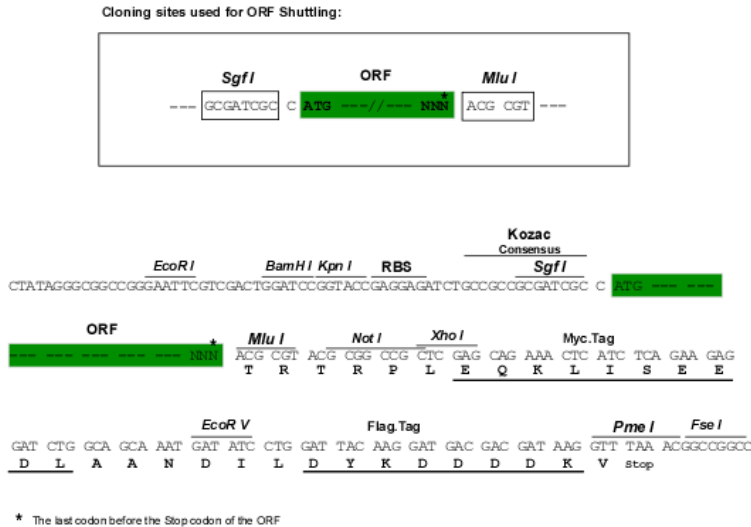
MSTLQLKETKVPVSVQFVGDVVLSHILDREGGTLKKEKAQLLVNPQKVIKKADCELEKSDLEVLEDQNY
 VKVLGRNIQESLNGSAKDGRNKVYFSFQQRKHPEEMTKLALAKTSGKKDPLDSNDPEITKNIAQKSKG
 HSTSEKAPLVNHNKTEFLSTQPHNLRKRIIASRSHYDSESEYSASSSEDDEEATKDEEEDTNVARLSQKS
 QGQNRLLPAPVSKETLPKPKKRDKASDLVEEYFEAHSSKVLTSRDLQRLRRARVDQKTLHNLRLKFPV
 SFSAEIERLNQQHEKLFHKWMLQLHLGFNIVLYLGLSKRDLEKFRITMLQDSIHVVINGYFPGVSVKSI
 LNSITEDVLSHVGTFSVLDQRDWIINRFKEDSSLELFLLIHNLDSQMLRGDNSQQILGQLSSLHNYYLI
 ASIDHLNAPLMWDHAKQSLYNLWYETTTYSPTYEETSYSNSLLVKQSGSLPLSSLIHVLRSLTPNARGI
 FRLLMKFQLDNQDPSYIGLSFQDFYQQCREAFLVNSDLTLRAQLTEFRDHKLIRTKKGTGVEYLLIPV
 DSGILADFLEKEEEEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001271526

ORF Size: 1731 bp

OTI Disclaimer: 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_001271526.1](#), [NP_001258455.1](#)

RefSeq Size: 3555 bp

RefSeq ORF: 1731 bp

Locus ID: 18393

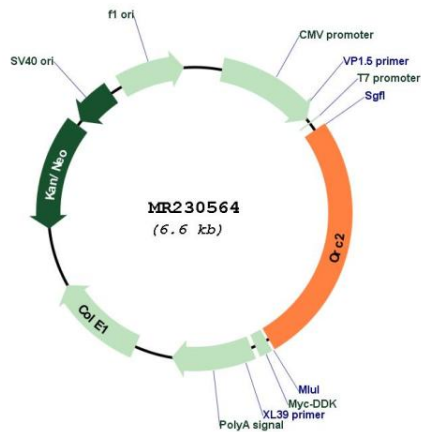
UniProt ID: [Q60862](#)

Cytogenetics: 1 C1.3

MW: 65.9 kDa

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]

Product images:



Circular map for MR230564