

Product datasheet for **MR217216**

Orc2 (NM_001025378) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Orc2 (NM_001025378) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Orc2
Synonyms:	AU041563; Orc2l
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR217216 representing NM_001025378
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCACTCTGCAGTTAAAGGAAACCAAGGTGCCAAGCGTGCAGTTTGTGGGAGATGATGATGTTCTTA
 GTCACATTCTGGACAGAGAAGGAGAATCCTTGGGAAACGGCTCTGCTAAAGATGGTAGGAATAAAGTTTA
 TTCTTTTCAACAAAGAAAGCACCCCTGAAGAGATGACTAAATTGGCTTTAGAACTAGCAAAAAACATCAGGA
 AAAAAGGATCCACTTGACTCAAATGATCCTGAAATCACAAAAACATTGCTCAAAAAAGTAAAGGCATT
 CTACTTCAGAGAAAGCTCCACTGGTGAACAATAACAAAACCTGAATTTCTGTCAACACAACCTCATAATCT
 AAGGAAAAGAATAATAGCGTCAAGGTCTCATTATGACAGTGAGAGTGAGTATTCTGCTTCCAGCTCAGAG
 GATGATGAAGAGGCTACAAAAGACGAAGAAGAAGACACTAATGTGGCCAGGCTCTCTCAGAAGAGTCAAG
 GTCAGAATAGACTTCTTCCAGCTCCTGTTTCAAAGAGACACTGCCTAAGAAAAAGAAAAGACAAAGC
 GAGTGACTTGGTAGAAGAATATTTGAAGCCCATAGTAGTTCAAAGTCTTAACATCTGATCGAACGCTG
 CAGAGGCTGAGGAGGCCAGAGTGGATCAGAAAACCTGCATAACTTACTGAGAAAAATTTGTGCCTTCTT
 TTTCTGCTGAAATTGAACGATTGAATCAACAGCATGAGAAAACGTTTCATAAATGGATGCTTCAGTTACA
 CCTTGGGTTCAACATTGTGCTTTATGGCTTGGGGTCCAAGAGAGATTTACTAGAAAAGTTTGAACACC
 ATGCTTCAAGATTCATTCATGTTGTCATCAACGGCTACTTCTGGCGTCAGTGTGAAATCAATCCTGA
 ACTCTATAACTGAAGATGCTCCTCAGTCATGTGGTACTTTCCAAAGTGTCTGGATCAGCGGGACTGGAT
 AATAAACAGATTTAAGAAGATCTTCTTTAGAACTCTTCTTCTTATCCACAATTTGGATAGCCAAATG
 TTAAGAGGAGACAATAGCCAGCAAATCTTGGACAGTTGTCATCATTACATAACGTGTATCTCATAGCAT
 CTATTGACCATCTCAATGCTCCTCCTCATGTGGATCATGCAAAGCAGAGTCTTTATAACTGGCTTTGGTA
 TGAAACTACTACATACAGTCCTTATACTGAAGAAACCTCCTATGAGAACTCCCTTCTGGTTAAGCAGTCT
 GGATCTCTGCCACTTAGTTCTCTGATTCATGTCTTACGAAGCCTTACCCCAATGAAGGGGATTTTCA
 GGCTACTTATGAAGTTCAGCTGGATAACCAGGACAGCCCTTCTACATTGGACTTTCTTTTCAAGATTT
 TTACCAGCAGTGTAGGGAAGCATTCTTGTAAACAGTGTCTCACACTCCGAGCCAGTTAACTGAATTT
 AGGGACCACAACTTATAAGAACAAGAAGGGAAGTGTGGTGTAGAATATTTATTAATCTGTTGACA
 CGGGAATATTGGCTGATTCTTGGAGAAGGAAGAGGAGGAGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217216 representing NM_001025378
 Red=Cloning site Green=Tags(s)

MSTLQLKETKVPVSVQFVGGDDVLSHILDREGESLGNLSAKDGRNKVYSFQQRKHPEEMTKLALAKTSG
 KKDPLDSNDPEITKNIAQKSKGHSTSEKAPLVNNKTEFLSTQPHNLKRRIIASRSHYDSESEYSASSSE
 DDEEATKDEEEDTNVARLSQKSQGNRLLPAPVSKETLPKPKKRDKASDLVEEYFEAHSSSKVLTSRDL
 QRLRRARVDQKTLHNLRLKRVPSFSAEIERLNQQHEKLFHKWMLQLHLGFNIVLYLGSKRDLLEKFRRT
 MLQDSIHVVINGYFPGVSVKSIILNSITEDVLSHVGTTFQSVLDQRDWINRPFKEDSLELFLLIHNLDSQM
 LRGDNSQILGQLSSLHNHYLIA SIDHLNAPLMWDHAKQSLYNWLWYETTTYSPTYEETSSENSLLVKQS
 GSLPLSSLIHVLRSLTPNARGIFRLMKFQLDNQDPSYIGLSFQDFYQQCREAFLVNSDLTLRAQLTEF
 RDHKLIRTKKGTGVEYLLIPVDSGILADLFLEKEEEEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

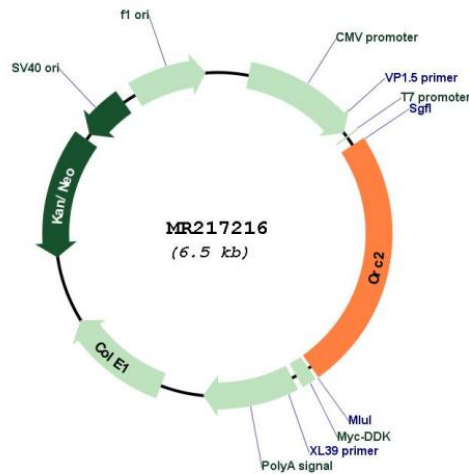
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001025378
ORF Size:	1584 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:	<ol style="list-style-type: none">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_001025378.2 , NP_001020549.1
RefSeq Size:	3030 bp
RefSeq ORF:	1587 bp
Locus ID:	18393
Cytogenetics:	1 C1.3
MW:	60.9 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]