

# **Product datasheet for RC201599L1**

# ORC2 (NM\_006190) Human Tagged Lenti ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** ORC2 (NM\_006190) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: ORC2

Synonyms: ORC2L

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

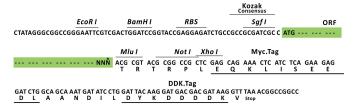
**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC201599).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_006190

ORF Size: 1731 bp



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#### **OTI Disclaimer:**

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customport@origene.com">customport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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:

Domains:

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:** <u>NM 006190.3</u>

 RefSeq Size:
 3140 bp

 RefSeq ORF:
 1734 bp

 Locus ID:
 4999

 UniProt ID:
 Q13416

 Cytogenetics:
 2q33.1

**Protein Families:** Stem cell - Pluripotency, Transcription Factors

ORC2

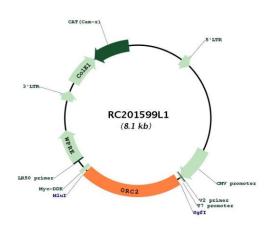
Protein Pathways: Cell cycle
MW: 66 kDa



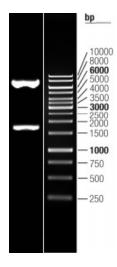
### **Gene Summary:**

The origin recognition complex (ORC) is a highly conserved six subunits protein complex essential for the initiation of the DNA replication in eukaryotic cells. Studies in yeast demonstrated that ORC binds specifically to origins of replication and serves as a platform for the assembly of additional initiation factors such as Cdc6 and Mcm proteins. The protein encoded by this gene is a subunit of the ORC complex. This protein forms a core complex with ORC3, -4, and -5. It also interacts with CDC45 and MCM10, which are proteins known to be important for the initiation of DNA replication. This protein has been demonstrated to specifically associate with the origin of replication of Epstein-Barr virus in human cells, and is thought to be required for DNA replication from viral origin of replication. Alternatively spliced transcript variants have been found, one of which is a nonsense-mediated mRNA decay candidate. [provided by RefSeq, Oct 2010]

## **Product images:**



Circular map for RC201599L1



Double digestion of RC201599L1 using Sgfl and Mul