

Product datasheet for TR310669

ORC1 Human shRNA Plasmid Kit (Locus ID 4998)

Product data:

Product Type: shRNA Plasmids

Product Name: ORC1 Human shRNA Plasmid Kit (Locus ID 4998)

Locus ID: 4998

Synonyms: HSORC1; ORC1L; PARC1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: ORC1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

4998). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>NM 001190818, NM 001190819, NM 004153.1, NM 004153.1, NM 004153.2, NM 004153.2, NM 004153.3, NM 004153.1, NM 004153.2, NM 004153.3, NM 004153.1, NM 004153.2, NM 004153.3, NM 004153.2, NM 004153.3, NM 004153.1, NM 004153.2, NM 004153.3, NM 004153.1, NM 004153.2, NM 004153.2, NM 004153.3, NM 004153.2, NM 004153.2, NM 004153.2, NM 004153.3, NM 004153.2, NM 00</u>

NM 001190819.1, NM 001190818.1, BC011539, BC011539.1, NM 004153.4

UniProt ID: Q13415

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

for the assembly of additional initiation factors such as Cdc6 and Mcm proteins. The protein encoded by this gene is the largest subunit of the ORC complex. While other ORC subunits are stable throughout the cell cycle, the levels of this protein vary during the cell cycle, which has been shown to be controlled by ubiquitin-mediated proteolysis after initiation of DNA

replication. This protein is found to be selectively phosphorylated during mitosis. It is also reported to interact with MYST histone acetyltransferase 2 (MyST2/HBO1), a protein involved in control of transcription silencing. Alternatively spliced transcript variants encoding

different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



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Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).