

ORC6 Knockout HeLa Cell Line, Homozygous

Catalog No.: RM02658

Basic Information

Catalog No.

RM02658

Category

Cell Line

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Gene Symbol

ORC6

Species

Human

Gene ID

23594

Swiss Prot

Q9Y5N6

Synonyms

ORC6L

Contact

☎ | 400-999-6126

✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

Background

The origin recognition complex (ORC) is a highly conserved six subunit 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. Gene silencing studies with small interfering RNA demonstrated that this protein plays an essential role in coordinating chromosome replication and segregation with cytokinesis. [provided by RefSeq, Oct 2010]

Product Information

Description

ORC6 Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing technology.

Allele-1:exon1 was deleted

Allele-2:exon1 was deleted

Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles.

Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins.

Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

Packaging

1 vial parental cell line and 1 vial knockout cell line

Shipping Conditions

Dry ice

Amount

1~5x10⁶ cells/vial

Storage

Stored in liquid nitrogen for a long time less than -130°C. Minimizing freeze-thaw cycles.

Protocol

Upon arrival, it should be maintained in DMEM medium with 10%(v/v) fetal bovine serum and 100U penicillin-streptomycin, at 37°C with 5% CO₂ condition.

1. Thaw the vial in 37°C water bath, and shake it to melt as soon as possible.
2. Transfer the cell suspension to a 15mL conical tube with pre-warmed 5mL complete medium and centrifuge 1000rpm for approximately 5 minutes at room temperature.
3. Remove and discard the supernatant.
4. Resuspend the cell pellet with 1mL pre-warmed complete medium and seed in 10cm dish.
5. Add 8-10mL of complete medium.
6. Incubate the culture at 37°C incubator with 5% CO₂.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Sequencing data

WT GTTGACCCGCGGCG*****ACCAGGGCTGGGC
Mut GTTGACCCGCGGCG***Deletion***ACCAGGGCTGGGC
Allele-1: exon1 was deleted

WT GTTGACCCGCGGCG*****ACCAGGGCTGGGC
Mut GTTGACCCGCGGCG***Deletion***ACCAGGGCTGGGC
Allele-2: exon1 was deleted

Genome sequence analysis of PCR products from parental (WT) and ORC6 knockout (KO) HeLa cells, using sanger sequencing.