

CDK8 Knockout 293T Cell Line, Homozygous

Catalog No.: RM02411

Basic Information

Catalog No.

RM02411

Category

Cell Line

Parental Cell line

293T

Genotype

Knockout

Gene Information

Gene Symbol

CDK8

Species

Human

Gene ID

1024

Swiss Prot

P49336

Synonyms

K35

Contact

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Background

This gene encodes a member of the cyclin-dependent protein kinase (CDK) family. CDK family members are known to be important regulators of cell cycle progression. This kinase and its regulatory subunit, cyclin C, are components of the Mediator transcriptional regulatory complex, involved in both transcriptional activation and repression by phosphorylation of the carboxy-terminal domain of the largest subunit of RNA polymerase II. This kinase regulates transcription by targeting the cyclin-dependent kinase 7 subunits of the general transcription initiation factor IIH, thus providing a link between the Mediator complex and the basal transcription machinery. Multiple pseudogenes of this gene have been identified. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2016]

Product Information

Description

CDK8 Knockout 293T Cell line is engineered from 293T cell line with Gene-Editing Technology.

Allele-1:49bp deletion in exon1

Allele-2:49bp deletion in exon1

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 GGACCTGTTGAAT*****CAAGAGGAAAGATG
Mut GGACCTGTTGAAT***Deletion***CAAGAGGAAAGATG
Allele-1: 49bp deletion in exon1
WT GGACCTGTTGAAT*****CAAGAGGAAAGATG
Mut GGACCTGTTGAAT***Deletion***CAAGAGGAAAGATG
Allele-2: 49bp deletion in exon1

Genome sequence analysis of PCR products from parental (WT) and CDK8 knockout (KO) 293T cells, using sanger sequencing.