

# CDKN3 Knockout 293T Cell Line, Homozygous

Catalog No.: RM02731

## Basic Information

### Catalog No.

RM02731

### Category

Cell Line

### Parental Cell line

293T

### Genotype

Knockout

## Gene Information

### Gene Symbol

CDKN3

### Species

Human

### Gene ID

1033

### Swiss Prot

Q16667

### Synonyms

KAP; CDI1; CIP2; KAP1; CDKN3

## Contact

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## Background

The protein encoded by this gene belongs to the dual specificity protein phosphatase family. It was identified as a cyclin-dependent kinase inhibitor, and has been shown to interact with, and dephosphorylate CDK2 kinase, thus prevent the activation of CDK2 kinase. This gene was reported to be deleted, mutated, or overexpressed in several kinds of cancers. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

## Product Information

### Description

CDKN3 Knockout cell line is engineered from 293T cell line with Gene-Editing Technology.

Allele-1:exon4 was deleted

Allele-2:exon4 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

1~5x10<sup>6</sup> 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% CO<sub>2</sub> 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% CO<sub>2</sub>.
7. A subcultivation ratio of 1:2-1:4 is recommended.

## Sequencing data

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WT CTGTGTATCCTGGT\*\*\*\*\*GCAGATGGAGGGAC  
Mut CTGTGTATCCTGGT\*\*\*Deletion\*\*\*GCAGATGGAGGGAC  
Allele-1: exon4 was deleted

WT CTGTGTATCCTGGT\*\*\*\*\*GCAGATGGAGGGAC  
Mut CTGTGTATCCTGGT\*\*\*Deletion\*\*\*GCAGATGGAGGGAC  
Allele-2: exon4 was deleted

Genome sequence analysis of PCR products from parental (WT) and CDKN3 knockout (KO) 293T cells, using sanger sequencing.