# CDKL4 Knockout NIH/3T3 Cell Line, Homozygous

Catalog No.: RM50126



## **Basic Information**

Catalog No. RM50126

Category Cell Line

Parental Cell line NIH/3T3

Genotype

Knockout

## **Gene Information**

Gene Symbol CDKL4

Species Mouse

Gene ID 381113

#### Swiss Prot Q3TZA2

Synonyms Gm942; Cdkl4

## Contact

6	400-999-6126
$\mathbf{X}$	cn.market@abclonal.com.cn
€	www.abclonal.com.cn

## Background

Predicted to enable cyclin-dependent protein serine/threonine kinase activity. Predicted to be involved in protein phosphorylation. Predicted to act upstream of or within phosphorylation. Predicted to be located in cytoplasm. Predicted to be active in nucleus. Is expressed in several structures, including alimentary system; central nervous system; reproductive system; respiratory system; and skeleton. Orthologous to human CDKL4 (cyclin dependent kinase like 4).

## **Product Information**

#### Description

CDKL4 Knockout cell line is engineered from NIH/3T3 cell line with Gene-Editing Technology. Allele-1:61bp deletion in exon3

Allele-2:2bp deletion in exon3

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  $37^{\circ}$ 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.
- 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.
  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%  $CO_2$ .
- 7. A subcultivation ratio of 1:2-1:4 is recommended.

## Sequencing data

WT AGTTGAAACACCCA\*\*\*\*\*\*\*\*\*\*\*CCCAAACGGGTAAG Mut AGTTGAAACACCCA\*\*\*Deletion\*\*\*CCCAAACGGGTAAG Allele-1: 61bp deletion in exon3

WT CCCAAACCTCGTGA\*\*\*\*\*\*\*\*\*\*GTTAAACGAGCTGG Mut CCCAAAC-TCGTGA\*\*\*\*\*\*\*\*\*\*GTTAAAC-AGCTGG Allele-2: 2bp deletion in exon3 Genome sequence analysis of PCR products from parental (WT) and CDKL4 knockout (KO) NIH/3T3 cells, using sanger sequencing.