

NDUFAF3 Knockout HeLa Cell Line, Homozygous

Catalog No.: RM02686

Basic Information

Catalog No.

RM02686

Category

Cell Line

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Gene Symbol

NDUFAF3

Species

Human

Gene ID

25915

Swiss Prot

Q9BU61

Synonyms

2P1; E3-3; C3orf60; MC1DN18

Contact

☎ | 400-999-6126

✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

Background

This gene encodes a mitochondrial complex I assembly protein that interacts with complex I subunits. Mutations in this gene cause mitochondrial complex I deficiency, a fatal neonatal disorder of the oxidative phosphorylation system. Alternatively spliced transcript variants encoding different isoforms have been identified.

Product Information

Description

NDUFAF3 Knockout cell line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:113bp deletion in exon2

Allele-2:113bp deletion in exon2

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 GCTCTCGCCGCGG*****CTCGGCCCTGCGC
Mut GCTCTCGCCGCGG***Deletion***CTCGGCCCTGCGC
Allele-1: 113bp deletion in exon2

WT GCTCTCGCCGCGG*****CTCGGCCCTGCGC
Mut GCTCTCGCCGCGG***Deletion***CTCGGCCCTGCGC
Allele-2: 113bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and NDUFAF3 knockout (KO) HeLa cells, using sanger sequencing.