

MAPK10 Knockout HeLa Cell Line, Homozygous

Catalog No.: RM01928

Basic Information

Catalog No.

RM01928

Category

Cell Line

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Gene Symbol

MAPK10

Species

Human

Gene ID

5602

Swiss Prot

P53779

Synonyms

JNK3; JNK3A; PRKM10; SAPK1b; p493F12; p54bSAPK

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Background

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as integration points for multiple biochemical signals and are involved in a wide variety of cellular processes, such as proliferation, differentiation, transcription regulation and development. This kinase is specifically expressed in a subset of neurons in the nervous system and is activated by threonine and tyrosine phosphorylation. Targeted deletion of this gene in mice suggests that it may have a role in stress-induced neuronal apoptosis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2015]

Product Information

Description

MAPK10 Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:80bp deletion in exon2

Allele-2:80bp 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 TACAGTGCCGCGTA*****ACCGGGAGCTGGTC
Mut TACAGTGCCGCGTA***Deletion***ACCGGGAGCTGGTC
Allele-1: 80bp deletion in exon2

WT TACAGTGCCGCGTA*****ACCGGGAGCTGGTC
Mut TACAGTGCCGCGTA***Deletion***ACCGGGAGCTGGTC
Allele-2: 80bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and MAPK10 knockout (KO) HeLa cells, using sanger sequencing.