

# 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

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## 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**

1~5x10<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 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.