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MAPK3 Knockdown 293T Cell Line, Heterozygous

Catalog No.: RM02162

Basic Information

Catalog No.
RM02162

Category
Cell Line

Parental Cell line
293T

Genotype
Knockdown

Background

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq, Jul 2008]

Gene Information

Gene Symbol
MAPK3

Species
Human

Gene ID
5595

Swiss Prot
P27361

Synonyms
ERK-1; ERK1; ERT2; HS44KDAP; HUMKER1A; P44ERK1; P44MAPK; PRKM3; p44-ERK1; p44-MAPK

Product Information

Description
MAPK3 Knockdown 293T Cell Line is engineered from 293T cell line with Gene-Editing Technology.
Allele-1:56bp deletion in exon2
Allele-2:57bp 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
1~5x10^6 cells/vial

Storage
Stored in liquid nitrogen for a long time less than -130℃. 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℃ with 5% CO_2 condition.
1. Thaw the vial in 37℃ 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℃ incubator with 5% CO_2.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Contact

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Sequencing data

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WT    CGTGCGCAAGACTC**********CTCCGGGAGATCCA
Mut   CGTGCGCAAGACTC***Deletion***CTCCGGGAGATCCA
Allele-1:   56bp deletion in exon2

WT    CGTGCGCAAGACTC**********TCCGGGAGATCCAG
Mut   CGTGCGCAAGACTC***Deletion***TCCGGGAGATCCAG
Allele-2:   57bp deletion in exon2
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Genome sequence analysis of PCR products from parental (WT) and MAPK3 knockdown (KD) 293T cells, using sanger sequencing.