

MAPK1 Knockout HeLa Cell Lysate, Homozygous

Catalog No.: RM01783

Basic Information

Catalog No.

RM01783

Category

Cell Lysate

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Species

Human

Gene ID

5594

Swiss Prot

P28482

SynonymsERK; ERK-2; ERK2; ERT1; MAPK2;
P42MAPK; PRKM1; PRKM2; p38; p40;
p41; p41mapk; p42-MAPK

Contact

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

Background

This gene encodes a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. One study also suggests that this protein acts as a transcriptional repressor independent of its kinase activity. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene. [provided by RefSeq, Jan 2014]

Product Information

Description

MAPK1 Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing technology.

Allele-1:115bp deletion in exon3

Allele-2:121bp 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 Lysate and 1 vial knockout cell Lysate

Shipping Conditions

4°C

Amount

50μL, 2μg/μL.

Storage

Lysate is stable for 12 months when stored at -20°C. Minimizing freeze-thaw cycles.

Protocol

To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

Sequencing data

WT AACACAGATATATAG*****AGCTAACGTTCTGC
Mut AACACAGATATATAG***Deletion***AGCTAACGTTCTGC
Allele-1: 115bp deletion in exon3

WT CAAACAGATATATA*****ACGTTCTGCACCGT
Mut CAAACAGATATATA***Deletion***ACGTTCTGCACCGT
Allele-2: 121bp deletion in exon3

Genome sequence analysis of PCR products from parental (WT) and MAPK1 knockout (KO) HeLa cells, using sanger sequencing.