abcam

Product datasheet

Human MAP2K7 (MKK7) knockout A549 cell line ab266914

1 Image

Overview

Product name Human MAP2K7 (MKK7) knockout A549 cell line

Parental Cell Line A549
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, Homozygous: 1 bp insertion in exon 6

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Tested applications Suitable for: WB

Biosafety level 2

General notesRecommended control: Human wild-type A549 cell line (<u>ab255450</u>). Please note a wild-type cell line is not automatically included with a knockout cell line order, if required please add

recommended wild-type cell line at no additional cost using the code WILDTYPE-TMTK1.

 $\textbf{Cryopreservation cell medium:} \ \ \textbf{Cell Freezing Medium-DMSO Serum free media, contains}$

8.7% DMSO in MEM supplemented with methyl cellulose.

Culture medium: F-12K + 10% FBS

Initial handling guidelines: Upon arrival, the vial should be stored in liquid nitrogen vapor phase and not at -80°C. Storage at -80°C may result in loss of viability.

- 1. Thaw the vial in 37°C water bath for approximately 1-2 minutes.
- 2. Transfer the cell suspension (0.8 mL) to a 15 mL/50 mL conical sterile polypropylene centrifuge tube containing 8.4 mL pre-warmed culture medium, wash vial with an additional 0.8 mL culture medium (total volume 10 mL) to collect remaining cells, and centrifuge at 201 x g (rcf) for 5 minutes at room temperature. 10 mL represents minimum recommended dilution. 20 mL represents maximum recommended dilution.
- 3. Resuspend the cell pellet in 5 mL pre-warmed culture medium and count using a haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of 2x10³-1x10⁴ cells/cm². Seeding density is given as a guide only and should be scaled to align with individual lab schedules.
- 4. Incubate the culture at 37°C incubator with 5% CO₂. Cultures should be monitored daily.

Subculture guidelines:

All seeding densities should be based on cell counts gained by established methods. A guide seeding density of $6x10^4$ cells/cm² is recommended.

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A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.

Cells should be passaged when they have achieved 80-90% confluence.

Do not exceed 7x10⁴ cells/cm².

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We will provide viable cells that proliferate on revival.

Properties

Tissue

Number of cells 1 x 10⁶ cells/vial, 1 mL

Adherent /Suspension Adherent

Cell type epithelial

Disease Carcinoma

Gender Male

STR Analysis Amelogenin X,Y D5S818: 11 D13S317: 11 D7S820: 8, 11 D16S539: 11, 12 vWA: 14 TH01:

8,9.3 TPOX: 8,11 CSF1PO: 10, 12

Antibiotic resistance Puromycin 1.00µg/ml

Mycoplasma free Yes

Storage instructions Shipped on Dry Ice. Store in liquid nitrogen.

Lung

Storage buffer Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

Target

Function Stress activated, dual specificity kinase that activates the JUN kinases MAPK8/JNK1,

MAPK9/JNK2 and MAPK10/JNK3.

Tissue specificityUbiquitous; with highest level of expression in skeletal muscle. Isoform 3 is found at low levels in

placenta, fetal liver, and skeletal muscle.

Sequence similarities Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase

subfamily.

Contains 1 protein kinase domain.

Post-translational

modifications

Activated by phosphorylation on Ser/Thr.

Cellular localization Nucleus. Cytoplasm.

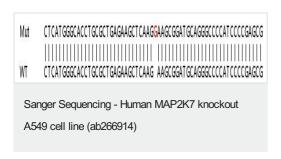
Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab266914 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 47 kDa.

Images



Homozygous: 1 bp insertion in exon6

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