abcam

Product datasheet

Human CHEK1 heterozygous knockout A549 cell line ab276102

画像数 4

製品の概要

製品名 Human CHEK1 heterozygous knockout A549 cell line

Parental Cell Line A549
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, Heterozygous: 46 bp deletion in exon 3 and wild-

type.

Passage number <20

Knockout validation Sanger Sequencing

Biosafety level

特記事項 Recommended control: Human wild-type A549 cell line (ab275463). 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.

Cryopreservation cell medium: 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 6x10⁴ cells/cm² is recommended.

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

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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.

製品の特性

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

Viability ~50%

Adherent /Suspension Adherent

Tissue Lung

Cell type epithelial

Disease Carcinoma

Gender Male

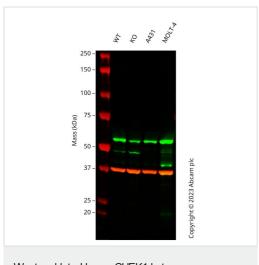
Mycoplasma free Yes

保存方法 Shipped on Dry Ice. Store in liquid nitrogen.

パップァー Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

ターゲット情報

画像



Western blot - Human CHEK1 heterozygous knockout A549 cell line (ab276102)

All lanes: Anti-CHEK1 antibody at 1/1000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: CHEK1 knockout A549 cell lysate

Lane 3: A431 cell lysate

Lane 4: MOLT-4 cell lysate

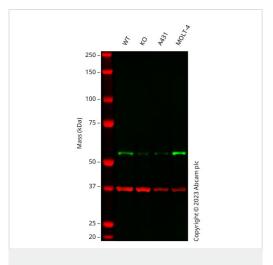
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 57 kDa

Anti-CHEK1 antibody [2G1D5] staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (ab181602)

loading control staining at 1/20000 dilution, shown in red. In Western blot, this antibody was shown to bind specifically to CHEK1. A band was observed at 57 kDa in wild-type A549 cell lysates with a reduction in signal observed at this size in CHEK1 heterozygous knockout cell line. To generate this image, wild-type and CHEK1 heterozygous knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L 800CW and Goat anti-Rabbit IgG H&L 680RD at 1/20000 dilution.



Western blot - Human CHEK1 heterozygous knockout A549 cell line (ab276102)

All lanes : Anti-Chk1 antibody [EP691Y] (<u>ab40866</u>) at 1/10000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: CHEK1 knockout A549 cell lysate

Lane 3 : A431 cell lysate
Lane 4 : MOLT-4 cell lysate

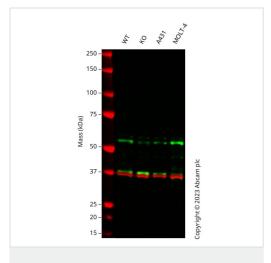
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 57 kDa

Anti-CHEK1 antibody [EP691Y] (ab40866) staining at 1/10000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab40866 was shown to bind specifically to CHEK1. A band was observed at 57 kDa in wild-type A549 cell lysates with a reduction in signal observed at this size in CHEK1 heterozygous knockout cell line. To generate this image, wild-type and CHEK1 heterozygous knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature,

washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit lgG H&L 800CW and Goat anti-Mouse lgG H&L 680RD at 1/20000 dilution.



Western blot - Human CHEK1 heterozygous knockout A549 cell line (ab276102)

All lanes: Anti-Chk1 antibody [E250] (ab32531) at 1/1000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: CHEK1 knockout A549 cell lysate

Lane 3 : A431 cell lysate

Lane 4 : MOLT-4 cell lysate

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Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 57 kDa

Anti-CHEK1 antibody [E250] (ab32531) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab32531 was shown to bind specifically to CHEK1. A band was observed at 57 kDa in wild-type A549 cell lysates with a reduction in signal observed at this size in CHEK1 heterozygous knockout cell line. To generate this image, wild-type and CHEK1 heterozygous knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Sanger Sequencing - Human CHEK1 heterozygous knockout A549 cell line (ab276102).

47 bp deletion in exon 3 and wild type.

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