abcam

Product datasheet

Human ATG10 knockout HeLa cell line ab265682

4 图像

概述

Parental Cell Line HeLa
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 5 bp deletion in exon 5 and 92 bp insertion in exon 5

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

经测试应用 适用于: WB

Biosafety level 2

常规说明

Recommended control: Human wild-type HeLa cell line (<u>ab255928</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.

Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.

Culture medium: DMEM (High Glucose) + 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 2x10⁴ 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 $2x10^4$ 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.

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We will provide viable cells that proliferate on revival.

性能

Cell type

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

Adherent / Suspension Adherent
Tissue Cervix

Disease Adenocarcinoma

Gender Female

STR Analysis Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18

TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

Mycoplasma free Yes

存放说明 Shipped on Dry Ice. Store in liquid nitrogen.

epithelial

存储溶液 Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

靶标

功能 E2-like enzyme involved in autophagy. Acts as an E2-like enzyme that catalyzes the conjugation of

ATG12 to ATG5. ATG12 conjugation to ATG5 is required for autophagy. Likely serves as an ATG5-recognition molecule. Not involved in ATG12 conjugation to ATG3 (By similarity). Plays a

role in adenovirus-mediated cell lysis.

序列相似性 Belongs to the ATG10 family.

细**胞定位** Cytoplasm.

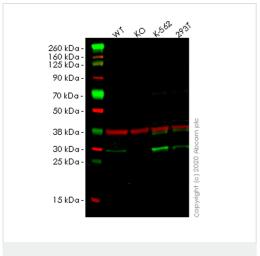
应用

The Abpromise guarantee Abpromise™承诺保证使用ab265682于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 25 kDa.

图片



Western blot - Human ATG10 knockout HeLa cell line (ab265682)

All lanes : Anti-ATG10 antibody [EPR4804] (<u>ab124711</u>) at 1/1000 dilution

Lane 1 : Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2: ATG10 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3: K562 (Human chronic myelogenous leukemia lymphoblast cell line) whole cell lysate

Lane 4: HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lysates/proteins at 20 µg per lane.

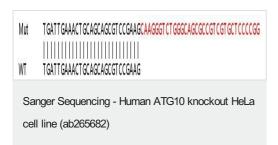
Secondary

All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

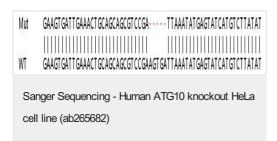
Predicted band size: 25 kDa
Observed band size: 28 kDa

Lanes 1-4: Merged signal (red and green). Green - <u>ab124711</u> observed at 28 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

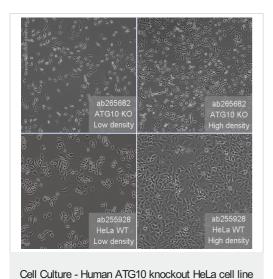
ab124711 Anti-ATG10 antibody [EPR4804] was shown to specifically react with ATG10 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265682 (knockout cell lysate ab258786) was used. Wild-type and ATG10 knockout samples were subjected to SDS-PAGE. ab124711 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Allele-1: 92 bp insertion in exon 5.



Allele-2: 5 bp deletion in exon 5.



Representative images ATG10 knockout HeLa cells, low and high confluency examples (top left and right respectively) and wild-type HeLa cells, low and high confluency (bottom left and right respectively) showing typical adherent, epithelial-like morphology. Images were captured at 10X magnification using a EVOS M5000 microscope.

(ab265682)

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