

Human HIST1H1C (Histone H1.2) knockout A549 cell line ab261873

3 图像

概述

产品名称	人HIST1H1C (Histone H1.2) knockout A549 cell line
Parental Cell Line	A549
Organism	Human
Mutation description	Knockout achieved by CRISPR/Cas9; X = 8 bp deletion; Frameshift = 99%
Passage number	<20
Knockout validation	Next Generation Sequencing (NGS), Western Blot (WB)
经测试应用	适用于: Next Generation Sequencing, WB
Biosafety level	1
常规说明	<p>Recommended control: Human wild-type A549 cell line (ab259777). 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.</p> <p>Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.</p> <p>Culture medium: DMEM:Hams F12 + 5% FBS</p> <p>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.</p> <ol style="list-style-type: none"> 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 2×10^3-1×10^4 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. <p>Subculture guidelines:</p> <p>All seeding densities should be based on cell counts gained by established methods. A guide seeding density of 6×10^4 cells/cm² is recommended.</p>

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 7×10^4 cells/cm².

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We will provide viable cells that proliferate on revival.

性能

Number of cells	1 x 10 ⁶ cells/vial, 1 mL
Adherent /Suspension	Adherent
Tissue	Lung
Cell type	epithelial
Disease	Carcinoma
Gender	Male
Mycoplasma free	Yes
存放说明	Shipped on Dry Ice. Store in liquid nitrogen.
存储溶液	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

靶标

功能	Histones H1 are necessary for the condensation of nucleosome chains into higher order structures.
序列相似性	Belongs to the histone H1/H5 family. Contains 1 H15 (linker histone H1/H5 globular) domain.
细胞定位	Nucleus. Chromosome.

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab261873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
Next Generation Sequencing		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

图片

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ACCAAGGCTGTGGCCGCCTCTAAAGAGCGTAGCGGAGTTTC
|.....+.....|.....+.....|.....+.....|.....+.....| Wild
TGGTCCGACACCGCGGAGATTCTCGCATCGCCTCAAAG      Type
T K A V A A S K E R S G V
   45         50         55

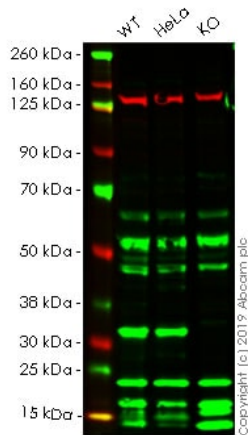
HIST1H1C    CCDS4577.1    exon #1/1

ACCAAGGCTGTGGC-----AAGAGCGTAGCGGAGTTTC
|.....+.....|.....+.....|.....+.....|.....+.....| Edited
TGGTCCGACACCG-----TTCTCGCATCGCCTCAAAG      Clone
T K A V A R A * R S F
   45         50

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Next Generation Sequencing - Human HIST1H1C
(Histone H1.2) knockout A549 cell line (ab261873)

8 bp deletion after Val47 of the WT protein



Western blot - Human HIST1H1C (Histone H1.2)
knockout A549 cell line (ab261873)

All lanes : Anti-Histone H1.2 antibody - ChIP Grade ([ab4086](#)) at 1/500 dilution

Lane 1 : Wild-type A549 (Human lung carcinoma cell line) whole cell lysate at 20 µg/ml

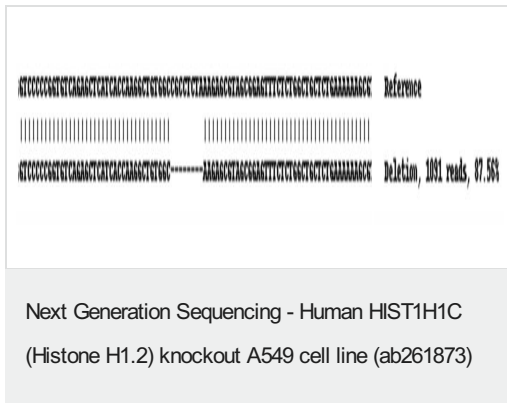
Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 20 µg/ml

Lane 3 : HIST1H1C knockout A549 (Human lung carcinoma cell line) whole cell lysate at 20 µg

Performed under reducing conditions.

Lanes 1 - 3: Merged signal (red and green). Green - [ab4086](#) observed at 30 kDa. Red - loading control, [ab130007](#), observed at 130 kDa.

[ab4086](#) was shown to recognize HIST1H1C in wild-type A549 cells as signal was lost at the expected MW in HeLa knockout cell line ab261873 (knockout cell lysate [ab261682](#)). Additional cross-reactive bands were observed in the wild-type and knockout samples. Wild-type and HeLa knockout samples were subjected to SDS-PAGE. Ab4086 and [ab130007](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



X = 8 bp deletion

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