abcam

Product datasheet

Human H1F0 knockout A-431 cell line ab262478

4 Images

Overview

Product name	Human H1F0 knockout A-431 cell line
Parental Cell Line	A431
Organism	Human
Passage number	<20
Knockout validation	Next Generation Sequencing (NGS), Western Blot (WB)
Tested applications	**Suitable for:** WB
Biosafety level	1
General notes	**Recommended control:** Human wild-type A-431 cell line (ab263975). 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 $2x10^4$ cells/cm^2. 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% CO_2. 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/cm^2 is recommended. 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.

This product is subject to limited use licenses from The Broad Institute and ERS Genomics Limited, and is developed with patented technology. For full details of the limited use licenses and relevant patents please refer to our limited use license and patent pages.

Properties

Number of cells	1 x 10^6 cells/vial, 1 mL
Viability	~80%
Adherent /Suspension	Adherent
Tissue	Skin
Cell type	epithelial
Disease	Epidermoid Carcinoma
Gender	Female
Mycoplasma free	Yes
Storage instructions	Shipped on Dry Ice. Store in liquid nitrogen.
Storage buffer	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether
Purity	Immunogen affinity purified

Target

Function	Histones H1 are necessary for the condensation of nucleosome chains into higher-order structures. The H1F0 histones are found in cells that are in terminal stages of differentiation or that have low rates of cell division.
Sequence similarities	Belongs to the histone H1/H5 family. Contains 1 H15 (linker histone H1/H5 globular) domain.
Post-translational modifications	Phosphorylated on Ser-17 in RNA edited version.
Cellular localization	Nucleus. Chromosome. The RNA edited version has been localized to nuclear speckles. During mitosis, it appears in the vicinity of condensed chromosomes.

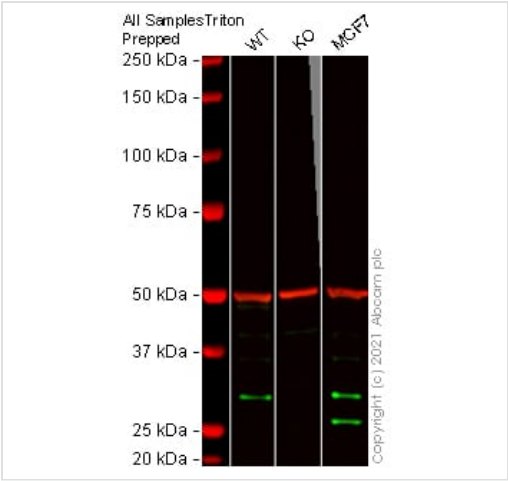
Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab262478 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: 21 kDa.

Images



Western blot - Human H1F0 knockout A-431 cell line (ab262478)

All lanes : Anti-Histone H1.0 antibody [27] (ab11080) at 1/500 dilution

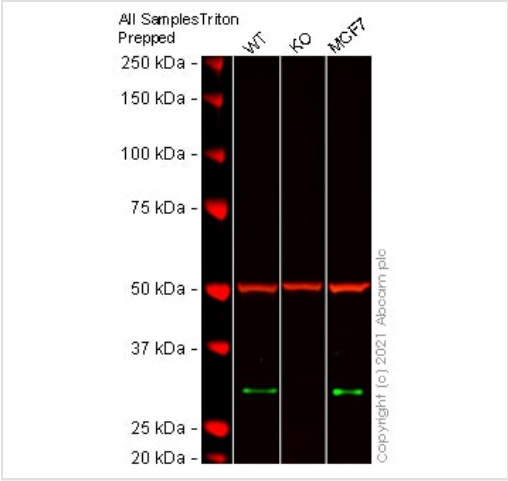
Lane 1 : Wild-type A431 cell lysate
Lane 2 : H1F0 knockout A431 cell lysate
Lane 3 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Performed under reducing conditions.

Predicted band size: 21 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab11080 observed at 30 kDa. Red - loading control ab52866 (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55 kDa.

ab11080 was shown to react with Histone H1 in wild-type A-431 cells in Western blot with loss of signal observed in H1F0 knockout cell line ab262478 (knockout cell lysate ab263919). Wild-type A-431 and H1F0 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab11080 and ab52866 (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4°C at a 1 in 500 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Western blot - Human H1F0 knockout A-431 cell line (ab262478)

All lanes : Anti-Histone H1.0 antibody [34] (ab11079) at 1/500 dilution

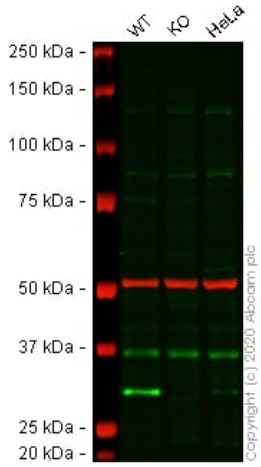
Lane 1 : Wild-type A431 cell lysate
Lane 2 : H1F0 knockout A431 cell lysate
Lane 3 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Performed under reducing conditions.

Predicted band size: 21 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab11079 observed at 30 kDa. Red - loading control ab52866 (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55 kDa.

ab11079 was shown to react with Histone H1 in wild-type A-431 cells in Western blot with loss of signal observed in H1F0 knockout cell line ab262478 (knockout cell lysate ab263919). Wild-type A-431 and H1F0 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab11079 and ab52866 (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4°C at a 1 in 500 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Western blot - Human H1F0 knockout A-431 cell line (ab262478)

All lanes : Anti-Histone H1.0 antibody [EPR6536] (ab134914) at 1/1000 dilution

Lane 1 : Wild-type A431 cell lysate
Lane 2 : H1F0 knockout A431 cell lysate
Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

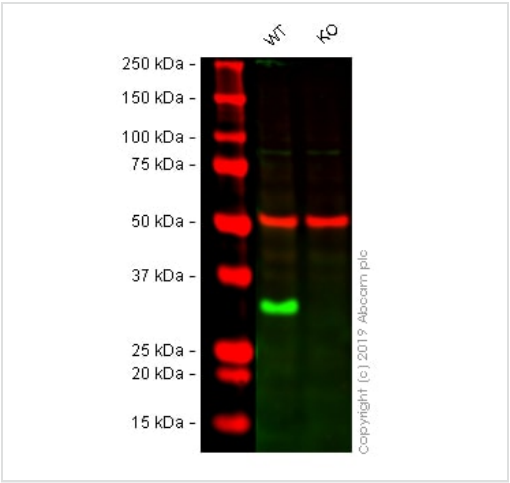
Performed under reducing conditions.

Predicted band size: 21 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab134914 observed at 30 kDa. Red - loading control, ab7291 (Mouse anti-Alpha Tubulin [DM1A] observed at 55kDa.

ab134914 was shown to react with Histone H1.0 in wild-type A-431 cells in Western blot. Loss of signal was observed when H1F0 knockout cell line ab262478 (knockout cell lysate ab263919) was used. Wild-type and H1F0 A-431 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab134914 and ab7291 (Mouse anti-Alpha Tubulin [DM1A] overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated 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 in

20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human H1F0 knockout A-431 cell line (ab262478)

All lanes : Anti-Histone H1.0 antibody [EPR6537] (ab125027) at 1/1000 dilution

Lane 1 : Wild-type A-431 (Human epidermoid carcinoma cell line) whole cell lysate
Lane 2 : H1F0 knockout A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Performed under reducing conditions.

Predicted band size: 21 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab125027 observed at 33 kDa. Red - loading control, ab7291 (Mouse anti-Alpha Tubulin [DM1A] observed at 55kDa.

ab125027 was shown to react with H1F0 in wild-type A-431 cells in Western blot Loss of signal was observed when H1F0 knockout cell line ab262478 (knockout cell lysate ab263919) was used. Wild-type A-431 and H1F0 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab125027 and ab7291 (Mouse anti-Alpha Tubulin [DM1A] overnight at 4°C at a 1 in 1000 dilution and a 1 in 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 in 20000 dilution for 1 hour at room temperature before imaging.

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