abcam

Product datasheet

Human IPO9 (Importin 9/RANBP9) knockout HeLa cell line ab265352

4 图像

概述

产品名称	人IPO9 (Importin 9/RANBP9) knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon 5 and 26 bp deletion 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 (**ab255928**). 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**.

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	Cervix
Cell type	epithelial
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.
存储溶液	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

靶标

功能	Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates. Is thought to mediate docking of the importin/substrate complex to the nuclear pore complex (NPC) through binding to nucleoporin and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to the importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (By similarity). Mediates the nuclear import of H2B histone (By similarity), RPS7 and RPL18A. Prevents the cytoplasmic aggregation of RPS7 and RPL18A by shielding exposed basic domains. May also import H2A, H3, H4 histones (By similarity), RPL4 and RPL6.
序列相似性	Belongs to the importin beta family. Contains 1 importin N-terminal domain.
细胞定位	Cytoplasm. Nucleus.

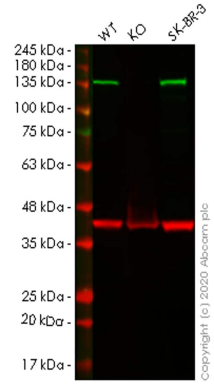
应用

The Abpromise guarantee	**Abpromise™承诺保证使用ab265352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: 116 kDa.

图片



Western blot - Human IPO9 knockout HeLa cell line (ab265352)

All lanes : Anti-Importin 9/RANBP9 antibody [EP1353Y] (**ab52605**) at 1/1000 dilution

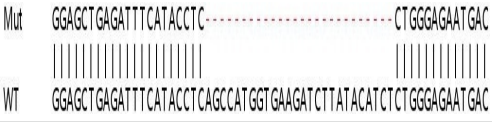
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : IPO9 knockout HeLa cell lysate
Lane 3 : SK-BR-3 cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 116 kDa

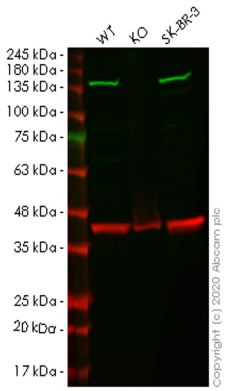
Lanes 1-3: Merged signal (red and green). Green - **ab52605**. Red - loading control, **ab8245** observed at 36 kDa.

ab52605 was shown to react with IPO9 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab265352 (knockout cell lysate **ab257483**) was used. Wild-type and IPO9 knockout samples were subjected to SDS-PAGE. **ab52605** 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 10000 dilution for 1 hour at room temperature before imaging.



Sanger Sequencing - Human IPO9 knockout HeLa cell line (ab265352)

Allele-1: 26 bp deletion in exon 5.



Western blot - Human IPO9 knockout HeLa cell line (ab265352)

All lanes : Anti-Importin 9/RANBP9 antibody [EPR1352] (**ab124710**) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : IPO9 knockout HeLa cell lysate
Lane 3 : SK-BR-3 cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 116 kDa

Lanes 1-3: Merged signal (red and green). Green - **ab124710**. Red - loading control, **ab8245** observed at 36 kDa.

ab124710 was shown to react with IPO9 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab265352 (knockout cell lysate **ab257483**) was used. Wild-type and IPO9 knockout samples were subjected to SDS-PAGE. **ab124710** 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 10000 dilution for 1 hour at room temperature before imaging.

Sanger Sequencing - Human IPO9 knockout HeLa cell line (ab265352)

Allele-2: 1 bp deletion in exon 5.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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