abcam

Product datasheet

Human GSN (Gelsolin) knockout HeLa cell line ab265201

画像数 6

製品の概要

製品名	Human GSN (Gelsolin) knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon 6 and 20 bp deletion in exon 6
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
アプリケーション	**適用あり:** WB
Biosafety level	2
特記事項	**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.

製品の特性

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
Antibiotic resistance	Puromycin 1.00µg/ml
Mycoplasma free	Yes
保存方法	Shipped on Dry Ice. Store in liquid nitrogen.
バッファー	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

ターゲット情報

機能	Calcium-regulated, actin-modulating protein that binds to the plus (or barbed) ends of actin monomers or filaments, preventing monomer exchange (end-blocking or capping). It can promote the assembly of monomers into filaments (nucleation) as well as sever filaments already formed. Plays a role in ciliogenesis.
組織特異性	Phagocytic cells, platelets, fibroblasts, nonmuscle cells, smooth and skeletal muscle cells.
関連疾患	Defects in GSN are the cause of amyloidosis type 5 (AMYL5) [MIM:105120]; also known as familial amyloidosis Finnish type. AMYL5 is a hereditary generalized amyloidosis due to gelsolin amyloid deposition. It is typically characterized by cranial neuropathy and lattice corneal dystrophy. Most patients have modest involvement of internal organs, but severe systemic disease can develop in some individuals causing peripheral polyneuropathy, amyloid cardiomyopathy, and nephrotic syndrome leading to renal failure.
配列類似性	Belongs to the villin/gelsolin family. Contains 6 gelsolin-like repeats.
翻訳後修飾	Phosphorylation on Tyr-86, Tyr-409, Tyr-465, Tyr-603 and Tyr-651 in vitro is induced in presence of phospholipids.
細胞内局在	Cytoplasm > cytoskeleton and Secreted.

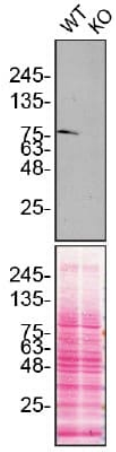
アプリケーション

The Abpromise guarantee	**Abpromise保証は、次のテスト済みアプリケーションにおけるab265201の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Predicted molecular weight: 86 kDa.

画像



Western blot - Human GSN (Gelsolin) knockout HeLa cell line (ab265201)

All lanes : Anti-Gelsolin antibody [EPR1942] (**ab109014**) at 1/20000 dilution

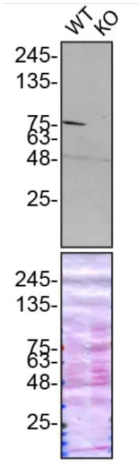
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : GSN knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 86 kDa

ab109014 was shown to react with GSN in wild-type HeLa cells in Western blot with loss of signal observed in GSN knockout cell line ab265201 (GSN knockout cell lysate **ab257204**). Wild-type HeLa and GSN knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with **ab109014** overnight at 4 °C at a 1/20000 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 1/5000 before imaging. These data were provided by YCharOS Inc., an open science company with the mission of characterizing commercially available antibody reagents for all human proteins. Abcam and YCharOS are working together to help address the reproducibility crisis by enabling the life science community to better evaluate commercially available antibodies.



Western blot - Human GSN (Gelsolin) knockout HeLa cell line (ab265201)

All lanes : Anti-Gelsolin antibody (**ab74420**) at 1/20000 dilution

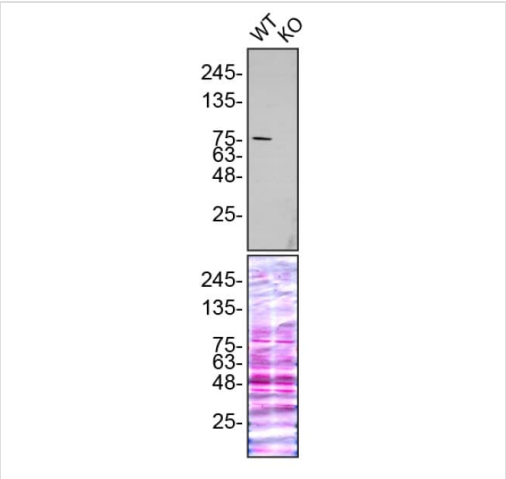
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : GSN knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 86 kDa

ab74420 was shown to react with GSN in wild-type HeLa cells in Western blot with loss of signal observed in GSN knockout cell line ab265201 (GSN knockout cell lysate **ab257204**). Wild-type HeLa and GSN knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with **ab74420** overnight at 4 °C at a 1/20000 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 1/5000 before imaging. This data was kindly provided by the YCharOS Inc., an open science company with the mission of characterizing every commercially available antibody reagent. Abcam are working with YCharOS to support their mission of antibody characterisation using knockout cell lines.



Western blot - Human GSN (Gelsolin) knockout HeLa cell line (ab265201)

All lanes : Anti-Gelsolin antibody [GS-2C4] (**ab11081**) at 1/200 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : GSN knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 86 kDa

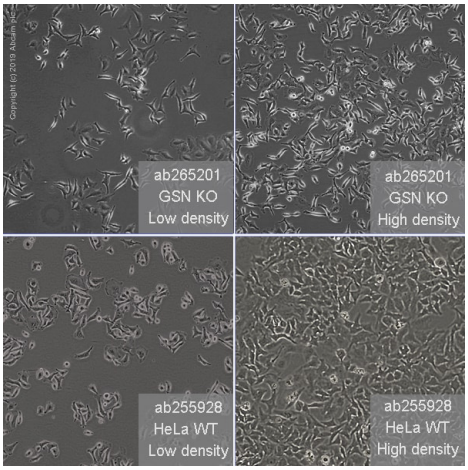
ab11081 was shown to react with GSN in wild-type HeLa cells in Western blot with loss of signal observed in GSN knockout cell line ab265201 (GSN knockout cell lysate **ab257204**). Wild-type HeLa and GSN knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with **ab11081** overnight at 4 °C at a 1/200 dilution. Blots were incubated with goat anti-mouse HRP secondary antibodies at 1/5000 before imaging. This data was kindly provided by the YCharOS Inc., an open science company with the mission of characterizing every commercially available antibody reagent. Abcam are working with YCharOS to support their mission of antibody characterisation using knockout cell lines.

Sanger Sequencing - Human GSN knockout HeLa cell line (ab265201)

Allele-1: 20 bp deletion in exon 6.

Sanger Sequencing - Human GSN knockout HeLa cell line (ab265201)

Allele-2: 1 bp deletion in exon 6.



Cell Culture - Human GSN (Gelsolin) knockout HeLa cell line (ab265201)

Representative images of GSN 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 XL Core microscope.

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