abcam

Product datasheet

Human NR3C2 (Mineralocorticoid Receptor) knockout HeLa cell line ab265540

画像数 2

製品の概要

製品名	Human NR3C2 (Mineralocorticoid Receptor) knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 1 bp insertion in exon 2
Passage number	<20
Knockout validation	Sanger Sequencing
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.
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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

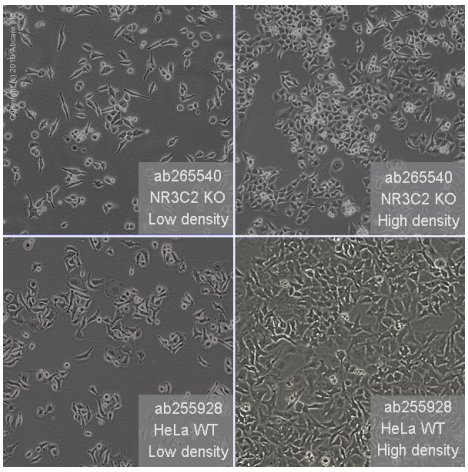
機能	Receptor for both mineralocorticoids (MC) such as aldosterone and glucocorticoids (GC) such as corticosterone or cortisol. Binds to mineralocorticoid response elements (MRE) and transactivates target genes. The effect of MC is to increase ion and water transport and thus raise extracellular fluid volume and blood pressure and lower potassium levels.
組織特異性	Ubiquitous. Highly expressed in distal tubules, convoluted tubules and cortical collecting duct in kidney, and in sweat glands. Detected at lower levels in cardiomyocytes, in epidermis and in colon enterocytes.
関連疾患	Defects in NR3C2 are a cause of autosomal dominant pseudohypoaldosteronism type I (AD-PHA1) [MIM:177735]. PHA1 is characterized by urinary salt wasting, resulting from target organ unresponsiveness to mineralocorticoids. There are 2 forms of PHA1: the autosomal dominant form that is mild, and the recessive form which is more severe and due to defects in any of the epithelial sodium channel subunits. In AD-PHA1 the target organ defect is confined to kidney. Clinical expression can vary from asymptomatic to moderate. It may be severe at birth, but symptoms remit with age. Familial and sporadic cases have been reported. Defects in NR3C2 are a cause of early-onset hypertension with severe exacerbation in pregnancy (EOHSEP) [MIM:605115]. Inheritance is autosomal dominant. The disease is characterized by the onset of severe hypertension before the age of 20, and by suppression of aldosterone secretion.
配列類似性	Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.

ドメイン	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.
翻訳後修飾	Phosphorylated.
細胞内局在	Cytoplasm. Nucleus. Endoplasmic reticulum membrane. Cytoplasmic and nuclear in the absence of ligand; nuclear after ligand-binding. When bound to HSD11B2, it is found associated with the endoplasmic reticulum membrane.

画像

Sanger Sequencing - Human NR3C2 knockout HeLa cell line (ab265540)

Homozygous: 1 bp insertion in exon 2.



Cell Culture - Human NR3C2 (Mineralocorticoid Receptor) knockout HeLa cell line (ab265540)

Representative images of NR3C2 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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