abcam

Product datasheet

Human BSG (CD147) knockout HEK-293T cell line ab266331

画像数6

製品の概要

製品名 Human BSG (CD147) knockout HEK-293T cell line

Parental Cell Line HEK293T
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 44 bp insertion in exon 4 and 5 bp deletion in exon 4

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

特記事項

Recommended control: Human wild-type HEK293T cell line (<u>ab255449</u>). 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 2x10⁴ 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.

Subculture guidelines:

All seeding densities should be based on cell counts gained by established methods. A guide seeding density of $2x10^4$ cells/cm² is recommended.

A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.

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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 10⁶ cells/vial, 1 mL

Adherent /Suspension Adherent
Tissue Kidney

Cell type epithelial

STR Analysis Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01:

7, 9.3 TPOX: 11 CSF1PO: 11, 12

Antibiotic resistance Puromycin 1.00µg/ml

Mycoplasma free Yes

保存方法 Shipped on Dry Ice. Store in liquid nitrogen.

パップァー Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

ターゲット情報

機能	Plays pivotal roles in spermatogenesis, embryo implantation, neural network formation and tumor
	progression. Stimulates adjacent fibroblasts to produce matrix metalloproteinases (MMPS). May
	target monocarboxylate transporters SLC16A1, SLC16A3 and SLC16A8 to plasma membranes
	of retinal pigment epithelium and neural retina. Seems to be a receptor for oligomannosidic
	glycans. In vitro, promotes outgrowth of astrocytic processes.

組織特異性 Present only in vascular endothelium in non-neoplastic regions of the brain, whereas it is present

in tumor cells but not in proliferating blood vessels in malignant gliomas.

配列類似性 Contains 1 lg-like C2-type (immunoglobulin-like) domain.

Contains 1 lg-like V-type (immunoglobulin-like) domain.

翻訳後修飾 N-glycosylated.

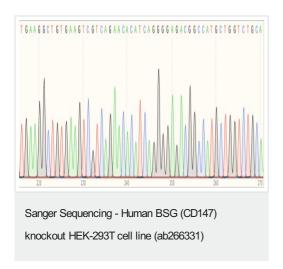
細胞内局在 Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified

by mass spectrometry in melanosome fractions from stage I to stage IV.

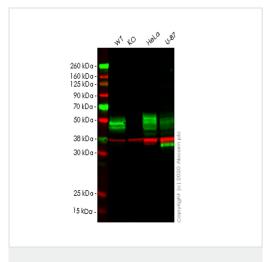
アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab266331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: 42 kDa.



Sequencing chromatogram displaying sequence edit in exon 4



Western blot - Human BSG (CD147) knockout HEK293T cell line (ab266331) **All lanes :** Anti-CD147 antibody [EPR4053] (ab108308) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2: BSG knockout HEK293T cell lysate

Lane 3 : HeLa cell lysate
Lane 4 : U-87 MG cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

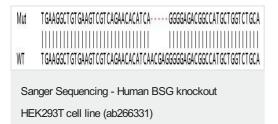
Performed under reducing conditions.

Predicted band size: 42 kDa **Observed band size:** 50 kDa

Lanes 1-4: Merged signal (red and green). Green - <u>ab108308</u> observed at 50 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

<u>ab108308</u> Anti-CD147 antibody [EPR4053] was shown to specifically react with CD147 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266331 (knockout cell lysate <u>ab256853</u>) was used. Wild-type and CD147 knockout

samples were subjected to SDS-PAGE. <u>ab108308</u> and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

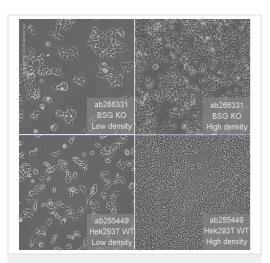


Allele-1: 5 bp deletion in exon 4

Mut	TGAAGGCTGTGAAGTCGTCAGAACACATCAGAGGGGGAGACGGCCATGCTGGTCTGCA
WT	T GAAGGCT GT GAAGT CGT CAGAACACAT CAACGAGGGGGAGACGGCCAT GCT GGT CT GCA

Sanger Sequencing - Human BSG knockout HEK293T cell line (ab266331) Allele-2: 44 bp insertion in exon 4.

Sanger Sequencing - Human BSG knockout HEK293T cell line (ab266331)



Cell Culture - Human BSG (CD147) knockout HEK293T cell line (ab266331) Representative images of BSG knockout HEK293T cells, low and high confluency examples (top left and right respectively) and wild-type HEK293T cells, low and high confluency (bottom left and right respectively) showing typical adherent, epithelial-like morphology. Images were captured at 10X magnification using an EVOS M5000 microscope.

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