abcam

Product datasheet

Human CBX1 (HP1 beta) knockout HEK-293T cell line ab266356

画像数3

製品の概要

製品名 Human CBX1 (HP1 beta) knockout HEK-293T cell line

Parental Cell Line HEK293T
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, Homozygous: 10 bp deletion in exon 2

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 (ab255449). 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

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 Component of heterochromatin. Recognizes and binds histone H3 tails methylated at 'Lys-9',

leading to epigenetic repression. Interaction with lamin B receptor (LBR) can contribute to the

association of the heterochromatin with the inner nuclear membrane.

組織特異性 Expressed in all adult and embryonic tissues.

配列類似性 Contains 2 chromo domains.

翻訳後修飾 Not phosphorylated.

Ubiquitinated.

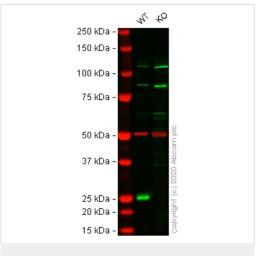
細胞内局在 Nucleus. Unassociated with chromosomes during mitosis.

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ab266356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: 21 kDa.

画像



Western blot - Human CBX1 (HP1 beta) knockout HEK293T cell line (ab266356)

All lanes: Anti-CBX1 / HP1 beta antibody (ab10478) at 1/1000

dilution

Lane 1: Wild-type HEK-293T cell lysate

Lane 2: CBX1 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

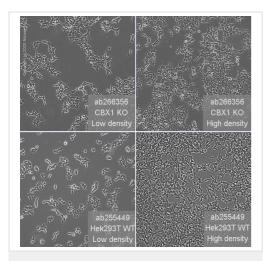
Performed under reducing conditions.

Predicted band size: 21 kDa **Observed band size:** 26 kDa

Lanes 1-2: Merged signal (red and green). Green - <u>ab10478</u> observed at 26 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control (<u>ab7291</u>) observed at 50 kDa.

<u>ab10478</u> was shown to react with CBX1 / HP1 beta in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line ab266356 (knockout cell lysate <u>ab257383</u>) was used. Wild-type HEK-293T and CBX1 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. <u>ab10478</u> and Anti-alpha Tubulin antibody [DM1A] - Loading Control (<u>ab7291</u>) overnight at 4°C at a 1 in 1000 dilution and a 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.

Sanger Sequencing - Human CBX1 knockout HEK293T cell line (ab266356) Homozygous: 10 bp deletion in exon2



Cell Culture - Human CBX1 (HP1 beta) knockout HEK293T cell line (ab266356)

Representative images CBX1 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 a EVOS M5000 microscope.

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