abcam

Product datasheet

Human MKI67 (Ki67) knockout HeLa cell lysate ab263762

画像数 2

製品の概要

製品名 Human MKI67 (Ki67) knockout HeLa cell lysate

製品の概要

Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line HeLa

Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, Homozygous: 7 bp deletion in exon 7.

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Reconstitution notesTo use as WB control, resuspend the lyophilizate in 50 μL of LDS* Sample Buffer to have a final

concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M

DTT.

*Usage of SDS sample buffer is not recommended with these lyophilized lysates.

特記事項

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found **here**. Please refer to our lysis protocol for further details on how our lysates are prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines. See here for more information on knockout cell lysates.

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アプリケーション 適用あり: WB

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製品の特性

保存方法

Store at -80°C. Please refer to protocols.

| 内容 | 1 kit |
|--|-----------|
| ab255511 - Human MKI67 knockout HeLa cell lysate | 1 x 100µg |
| ab255552 - Human wild-type HeLa cell lysate | 1 x 100µg |

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

ターゲット情報

機能

Required to maintain individual mitotic chromosomes dispersed in the cytoplasm following nuclear envelope disassembly (PubMed:27362226). Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the chromosome surface (PubMed:27362226). Prevents chromosomes from collapsing into a single chromatin mass by forming a steric and electrostatic charge barrier: the protein has a high net electrical charge and acts as a surfactant, dispersing chromosomes and enabling independent chromosome motility (PubMed:27362226). Binds DNA, with a preference for supercoiled DNA and AT-rich DNA (PubMed:10878551). Does not contribute to the internal structure of mitotic chromosomes (By similarity). May play a role in chromatin organization (PubMed:24867636). It is however unclear whether it plays a direct role in chromatin organization or whether it is an indirect consequence of its function in maintaining mitotic chromosomes dispersed.

配列類似性

Contains 1 FHA domain.
Contains 16 K167R repeats.

Contains 1 PP1-binding domain.

発生段階

Expression occurs preferentially during late G1, S, G2 and M phases of the cell cycle, while in cells in G0 phase the antigen cannot be detected (at protein level) (PubMed:6206131). Present at highest level in G2 phase and during mitosis (at protein level). In interphase, forms fiber-like structures in fibrillarin-deficient regions surrounding nucleoli (PubMed:2674163,

PubMed:8799815).

翻訳後修飾

Phosphorylated. Hyperphosphorylated in mitosis (PubMed:10502411, PubMed:10653604). Hyperphosphorylated form does not bind DNA.

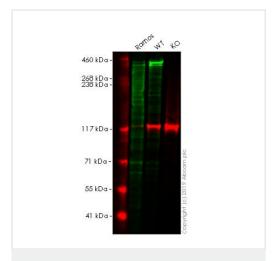
細胞内局在

Chromosome. Nucleus. Nucleus, nucleolus. Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface (PubMed:27362226). Associates with satellite DNA in G1 phase (PubMed:9510506). Binds tightly to chromatin in interphase, chromatin-binding decreases in mitosis when it associates with the surface of the condensed chromosomes (PubMed:15896774, PubMed:22002106). Predominantly localized in the G1 phase in the perinucleolar region, in the later phases it is also detected throughout the nuclear interior, being predominantly localized in the nuclear matrix (PubMed:22002106).

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ab263762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. |

画像



Western blot - Human MKI67 knockout HeLa cell lysate (ab263762)

Lane 1: Ramos cell lysate (20 µg)

Lane 2: Wild-type HeLa cell lysate (20 μg)

Lane 3: MKI67 knockout HeLa cell lysate (20 µg)

Lanes 1 - 3: Merged signal (red and green). Green - <u>ab16667</u> observed at 359 kDa. Red - loading control, <u>ab130007</u> observed at 125 kDa.

<u>ab16667</u> was shown to react with Ki67 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <u>ab255407</u> (knockout cell lysate ab263762) was used. Wild-type and Ki67 knockout samples were subjected to SDS-PAGE. <u>ab16667</u> and Anti-Vinculin antibody [VIN-54] (<u>ab130007</u>) were incubated overnight at 4°C at 1 in 100 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Homozygous: 7 bp deletion in exon 7

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