# abcam

## Product datasheet

## Human LMNB1 (Lamin B1) knockout HeLa cell lysate ab263825

### 画像数 4

#### 製品の概要

製品名 Human LMNB1 (Lamin B1) 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, 2 bp deletion in exon 1 and 2 bp insertion in exon 1.

Passage number <20

**Knockout validation** Sanger Sequencing, Western Blot (WB)

 $\label{eq:Reconstitution notes} \textbf{To use as WB control, resuspend the lyophilizate in 50 $\mu$L of LDS* Sample Buffer to have a final $\mu$L of LDS* Sample$ 

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

1

#### 製品の特性

#### 保存方法

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

内容	1 kit
ab255508 - Human LMNB1 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

Lamins are components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin.

関連疾患

Defects in LMNB1 are the cause of leukodystrophy demyelinating autosomal dominant adultonset (ADLD) [MIM:169500]. ADLD is a slowly progressive and fatal demyelinating leukodystrophy, presenting in the fourth or fifth decade of life. Clinically characterized by early autonomic abnormalities, pyramidal and cerebellar dysfunction, and symmetric demyelination of

the CNS. It differs from multiple sclerosis and other demyelinating disorders in that

neuropathology shows preservation of oligodendroglia in the presence of subtotal demyelination

and lack of astrogliosis.

配列類似性

Belongs to the intermediate filament family.

翻訳後修飾

B-type lamins undergo a series of modifications, such as farnesylation and phosphorylation. Increased phosphorylation of the lamins occurs before envelope disintegration and probably plays

a role in regulating lamin associations.

細胞内局在

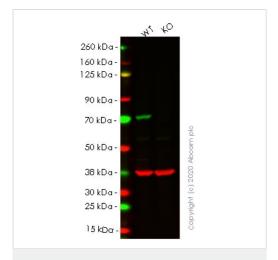
Nucleus inner membrane.

## アプリケーション

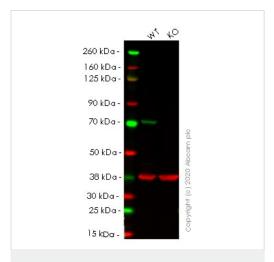
**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab263825の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

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 LMNB1 (Lamin B1) knockout HeLa cell lysate (ab263825)



Western blot - Human LMNB1 (Lamin B1) knockout HeLa cell lysate (ab263825)

Lane 1: Wild-type HeLa cell lysate (20µg)

Lane 2: LMNB1 knockout HeLa cell lysate (20µg)

**Lanes 1-2:** Merged signal (red and green). Green - <u>ab229025</u> observed at 66-70 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab229025 Recombinant Anti-Lamin B1 antibody [EPR22165-121] was shown to specifically react with LMNB1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab255404 (knockout cell lysate ab263825) was used. Wild-type and LMNB1 knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab229025 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) 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 (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Lane 1: Wild-type HeLa cell lysate (20µg)

Lane 2: LMNB1 knockout HeLa cell lysate (20µg)

**Lanes 1-2:** Merged signal (red and green). Green - <u>ab133741</u> observed at 66-70 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab133741 Recombinant Anti-Lamin B1 antibody [EPR8985(B)] was shown to specifically react with LMNB1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab255404 (knockout cell lysate ab263825) was used. Wild-type and LMNB1 knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab133741 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) 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 (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary

antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Mut	AGCT CAAT GACCGGCT GGCGGT GT ACAT ACAAGGT GCGCAGCCT GGAGACGAGAACA
WT	AGCT CAAT GACCGGCT GGCGGT GT ACAT CGACAAGGT GCGCAGCCT GGAGACGGAGAACA

Sanger Sequencing - Human LMNB1 knockout HeLa

cell lysate (ab263825)

cell lysate (ab263825)

Allele-1: 2 bp deletion in exon 1

Mut	AGCTCAATGACCGGCTGGCGGTGTACATA	CCGACAAGGTGCGCAGCCTGGAGACGGAGAA
	nger Sequencing - Humar	

Allele-2: 2 bp insertion in exon 1

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