abcam

Product datasheet

Human HDAC2 knockout HEK-293T cell lysate ab256937

画像数3

製品の概要

製品名 Human HDAC2 knockout HEK-293T cell lysate

製品の概要

Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line HEK293T

Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 20 bp deletion in exon2.

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Reconstitution notes To 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
ab260949 - Human HDAC2 knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

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

ターゲット情報

機能

Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events.

Histone deacetylases act via the formation of large multiprotein complexes.

Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its

transcriptional repressor activity.

組織特異性 Widely expressed; lower levels in brain and lung.

配列類似性 Belongs to the histone deacetylase family. HD type 1 subfamily.

翻訳後修飾 S-nitrosylated by GAPDH. In neurons, S-Nitrosylation at Cys-262 and Cys-274 does not affect the

enzyme activity but abolishes chromatin-binding, leading to increases acetylation of histones and activate genes that are associated with neuronal development. In embryonic cortical neurons, S-

Nitrosylation regulates dendritic growth and branching.

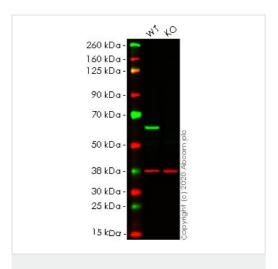
細胞内局在 Nucleus.

アプリケーション

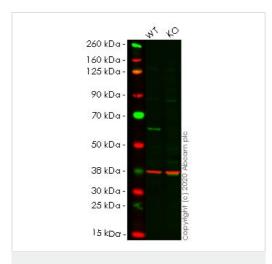
The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab256937の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Predicted molecular weight: 55 kDa.

画像



Western blot - Human HDAC2 knockout HEK293T cell lysate (ab256937)



Western blot - Human HDAC2 knockout HEK293T cell lysate (ab256937)

Lane 1: Wild-type HEK-293T cell lysate (20 µg)

Lane 2: HDAC2 knockout HEK-293T cell lysate (20 µg)

Lanes 1-2: Merged signal (red and green). Green - <u>ab219053</u> observed at 60 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

<u>ab219053</u> Anti-HDAC2 antibody [EPR20117] was shown to specifically react with HDAC2 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line <u>ab266588</u> (knockout cell lysate ab256937) was used. Wild-type and HDAC2 knockout samples were subjected to SDS-PAGE. <u>ab219053</u> and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°C at 1 in 1000 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.

Lane 1: Wild-type HEK-293T cell lysate (20 µg)

Lane 2: HDAC2 knockout HEK-293T cell lysate (20 µg)

Lanes 1-2: Merged signal (red and green). Green - <u>ab124974</u> observed at 60 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab124974 Anti-HDAC2 antibody [EPR5001] was shown to specifically react with HDAC2 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line ab266588 (knockout cell lysate ab256937) was used. Wild-type and HDAC2 knockout samples were subjected to SDS-PAGE. ab124974 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 10000 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	TAACAGCAAGTTATGGGTCATGCGGATGACCCTGTCCATA		
	WT	TAACAGCAAGTTATGGGTCATGCGGATTCTATGAGGCTTCATGGGATGACCCTGTCCATA		
Sanger Sequencing - Human HDAC2 knockout				
Sanger Sequencing - Human HDACZ knockout				
	HEK293T cell lysate (ab256937)			

Homozygous: 20 bp deletion in exon2

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