abcam

Product datasheet

Human SMARCC1 (BAF155) knockout HEK-293 cell lysate ab261662

2 图像

概述

产品概述 Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line HEK-293
Organism Human

Mutation description Knockout achieved by CRISPR/Cas9; X = 1 bp insertion, 2 bp insertion, 1 bp insertion

Passage number <20

Knockout validation Next Generation Sequencing (NGS), 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.

说明

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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经测试应用 适用于: WB

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存放说明

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

组 件	1 kit
ab280412 - Human SMARCC1 knockout HEK293 cell lysate	1 x 100µg
ab259780 - Human wild-type HEK-293 cell lysate	1 x 100µg

Cell type epithelial
Gender Female

靶标

功能

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). May stimulate the ATPase activity of the catalytic subunit of the complex. Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth.

组织特异性

 $\label{thm:expressed} \textbf{Expressed in brain, heart, muscle, placenta, lung, liver, muscle, kidney and pancreas.}$

序列相似性

Belongs to the SMARCC family.

Contains 1 SANT domain.
Contains 1 SWIRM domain.

翻译后修饰

Phosphorylated on undefined residues at the G2/M transition by ERK1 and other kinases. This may contribute to cell cycle specific inactivation of remodeling complexes containing the

phosphorylated protein.

细胞定位

Nucleus.

应用

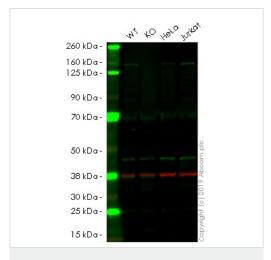
The Abpromise guarantee

Abpromise™承诺保证使用ab261662于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration.

图片



Western blot - Human SMARCC1 (BAF155) knockout HEK-293 cell lysate (ab261662)

Lane 1: Wild-type HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate 20 ug

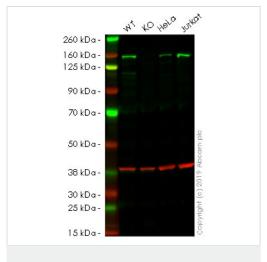
Lane 2: SMARCC1 knockout HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate 20 ug

Lane 3: HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate 20 ug

Lane 4: Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate 20 ug

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab172636</u> observed at 123 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

<u>ab172636</u> was shown to specifically react with SMARCC1 in wild-type HEK-293 cells as signal was lost in SMARCC1 knockout cell line <u>ab261854</u> (knockout cell lysate ab261662). Wild-type and SMARCC1 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% milk. Ab172636 and <u>ab8245</u> (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed <u>ab216773</u> and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed <u>ab216776</u> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human SMARCC1 (BAF155) knockout HEK-293 cell lysate (ab261662)

Lane 1: Wild-type HEK293 whole cell lysate 20 ug

Lane 2: SMARCC1 knockout HEK293 whole cell lysate 20 ug

Lane 3: HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate 20 ug

Lane 4: Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate 20 ug

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab172638</u> observed at 123 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab172638 was shown to recognize in wild-type HEK-293 cells as signal was lost at the expected MW in SMARCC1 knockout cell line ab261854 (knockout cell lysate ab261662). Additional cross-reactive bands were observed in the wild-type and knockout cell lysate. Wild-type and SMARCC1 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% milk. Ab172638 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

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