abcam

Product datasheet

Anti-HDAC2 antibody [EPR5001] - BSA and Azide free ab248081

KO 評価済 リコンビナント RabMAb

画像数 5

製品の概要

製品名	Anti-HDAC2 antibody [EPR5001] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR5001] to HDAC2 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** ICC/IF, WB, ChIP **適用なし:** Flow Cyt or IHC-P
種交差性	**交差種:** Mouse, Human **交差が予測される動物種:** Rat
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Wild-type HEK-293T, HAP1, HeLa, A431, SH-SY5Y, and Jurkat cell lysates. ICC/IF: Wild-type HAP1 cells. ChIP: Chromatin extract from HeLa cells.
特記事項	ab248081 is the carrier-free version of **ab124974**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR5001
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab248081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
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 55 kDa.
ChIP		Use 10 µg for 25 µg of chromatin. Please note product formulation is not optimised for ChIP application.

追加情報 Is unsuitable for Flow Cyt or IHC-P.

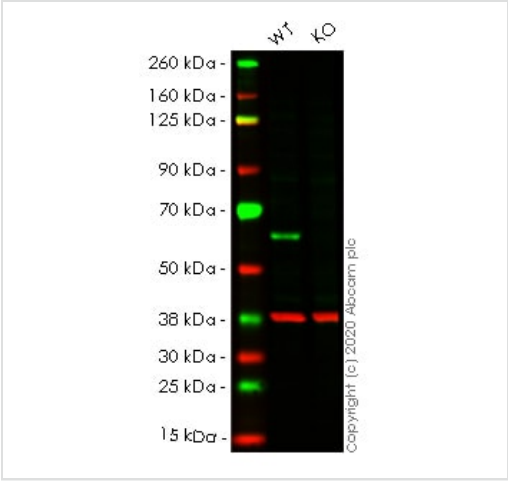
ターゲット情報

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.

画像



Western blot - Anti-HDAC2 antibody [EPR5001] - BSA and Azide free (ab248081)

All lanes : Anti-HDAC2 antibody [EPR5001] - ChIP Grade (**ab124974**) at 1/10000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : HDAC2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

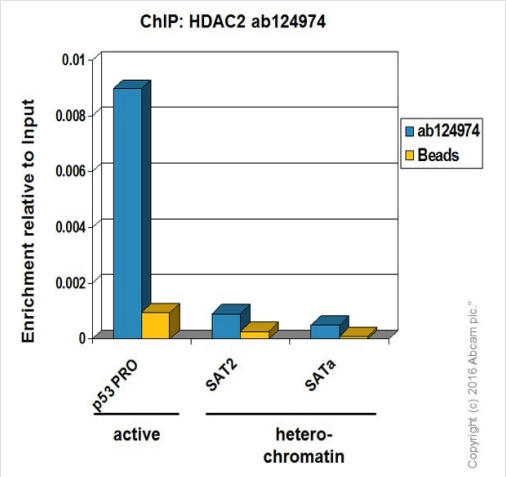
Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 55 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab124974**).

Lanes 1- 2: Merged signal (red and green). Green - **ab124974** observed at 55 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

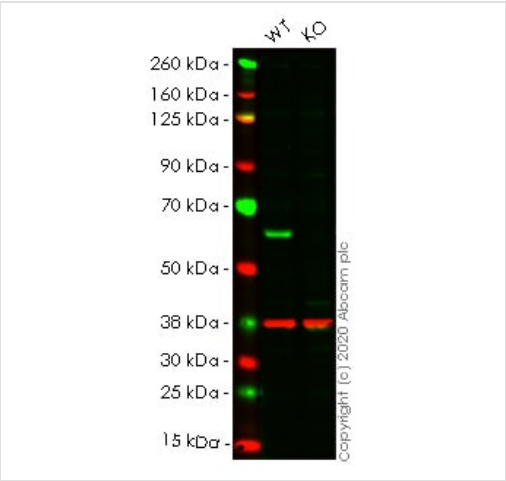
ab124974 was shown to react with HDAC2 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line **ab266589** (knockout cell lysate **ab256938**) was used. Wild-type HEK-293T and HDAC2 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. **ab124974** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



ChIP - Anti-HDAC2 antibody [EPR5001] - BSA and Azide free (ab248081)

This data was developed using the same antibody clone in a different buffer formulation (**ab124974**).

Chromatin was prepared from HeLa cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 25µg of chromatin, 10µg of **ab124974** (blue), and 20µl of Protein A/G sepharose beads. No antibody was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach). Primers and probes are located in the first kb of the transcribed region.



Western blot - Anti-HDAC2 antibody [EPR5001] - BSA and Azide free (ab248081)

All lanes : Anti-HDAC2 antibody [EPR5001] - ChIP Grade (**ab124974**) at 1/10000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : HDAC2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

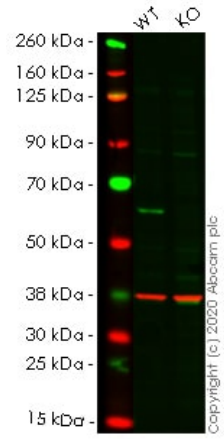
Predicted band size: 55 kDa
Observed band size: 60 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab124974**).

Lanes 1-2: Merged signal (red and green). Green - **ab124974** observed at 60 kDa. Red - loading control **ab8245** 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 **ab266590** (knockout cell lysate **ab256939**) 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 and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L

(IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-HDAC2 antibody [EPR5001] - BSA and Azide free (ab248081)

All lanes : Anti-HDAC2 antibody [EPR5001] - ChIP Grade (**ab124974**) at 1/10000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : HDAC2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

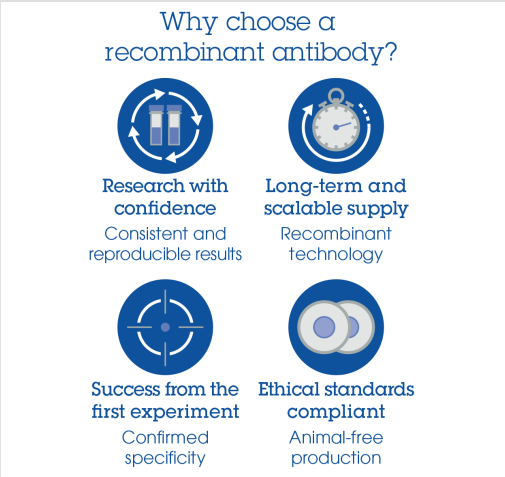
Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 60 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab124974**).

Lanes 1-2: Merged signal (red and green). Green - **ab124974** observed at 60 kDa. Red - loading control **ab8245** 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 IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Anti-HDAC2 antibody [EPR5001] - BSA and Azide free (ab248081)

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