abcam

Product datasheet

# Anti-HDAC8 antibody [EPR10338(2)] - BSA and Azide free ab232643

KO VALIDATED Recombinant RabMAb

4 Images

## Overview

| | |
|---|---|
| **Product name** | Anti-HDAC8 antibody [EPR10338(2)] - BSA and Azide free |
| **Description** | Rabbit monoclonal [EPR10338(2)] to HDAC8 - BSA and Azide free |
| **Host species** | Rabbit |
| **Tested applications** | **Suitable for:** Flow Cyt (Intra), WB, IP |
| **Species reactivity** | **Reacts with:** Mouse, Human<br>**Predicted to work with:** Rat |
| **Immunogen** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | WB: HAP1, K562 and HeLa whole cell lysates. |
| **General notes** | ab232643 is the carrier-free version of **ab187139**.<br><br>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.<br><br>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.<br><br>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.<br><br>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.<br><br>This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br><br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## Properties

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| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| **Storage buffer** | pH: 7.2<br>Constituent: PBS |
| **Carrier free** | Yes |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | EPR10338(2) |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab232643 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **Flow Cyt (Intra)** | | Use at an assay dependent concentration. |
| **WB** | | Use at an assay dependent concentration. Predicted molecular weight: 42 kDa. |
| **IP** | | Use at an assay dependent concentration. |

## Target

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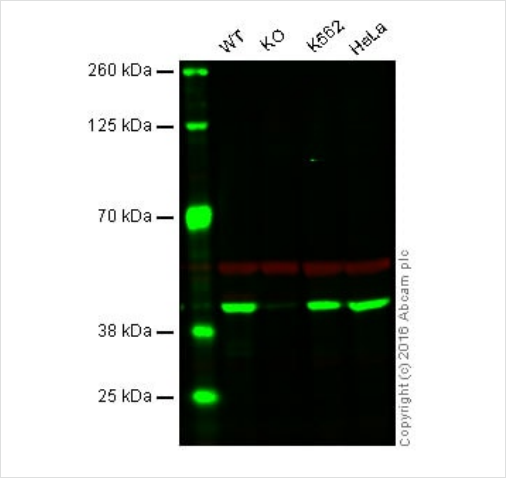
|---|---|
| **Function** | Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. May play a role in smooth muscle cell contractility. |
| **Tissue specificity** | Weakly expressed in most tissues. Expressed at higher level in heart, brain, kidney and pancreas and also in liver, lung, placenta, prostate and kidney. |
| **Sequence similarities** | Belongs to the histone deacetylase family. HD type 1 subfamily. |
| **Post-translational modifications** | Phosphorylated by PKA on serine 39. Phosphorylation reduces deacetylase activity observed preferentially on histones H3 and H4. |
| **Cellular localization** | Nucleus. Cytoplasm. Excluded from the nucleoli. Found in the cytoplasm of cells showing smooth muscle differentiation. |

## Images

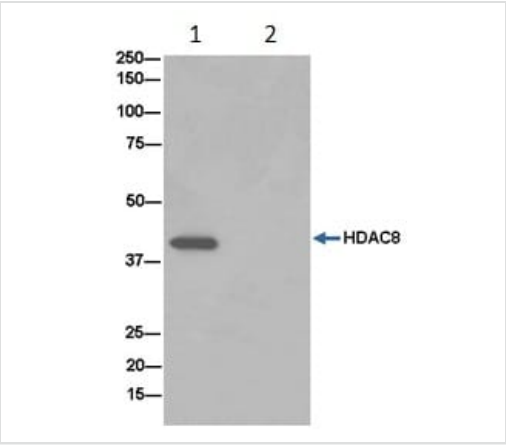



Western blot - Anti-HDAC8 antibody [EPR10338(2)] - BSA and Azide free (ab232643)

**Lane 1:** Wild-type HAP1 cell lysate (20 µg)
**Lane 2:** HDAC8 knockout HAP1 cell lysate (20 µg)
**Lane 3:** K562 (human chronic myelogenous leukemia cell line from bone marrow ) cell lysate (20 µg)
**Lane 4:** HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab187139**. Red - loading control, **ab7291**, observed at 52 kDa.
**ab187139** was shown to specifically react with HDAC8 when HDAC8 knockout samples were used. Wild-type and HDAC8 knockout samples were subjected to SDS-PAGE. **ab187139** and **ab7291** (loading control to alpha tubulin) were diluted 1/10 000 and 1/2000 respectively and incubated overnight at 4°C. 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 1/10,000 dilution for 1 h at room temperature before imaging.

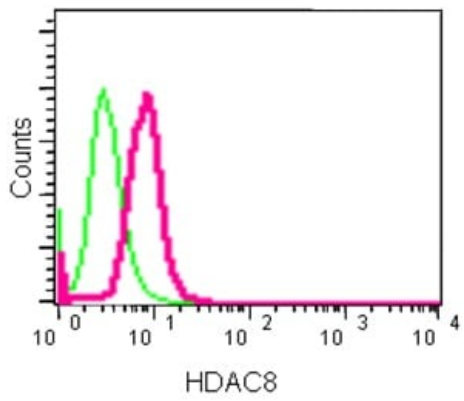
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187139**).




Immunoprecipitation - Anti-HDAC8 antibody [EPR10338(2)] - BSA and Azide free (ab232643)

Immunoprecipitation analysis of human fetal kidney tissue lysate labeling HDAC8 using **ab187139** at 1/50 dilution (Lane 1). Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 was used as secondary antibody. Lane 2: PBS instead of human fetal kidney tissue lysate.

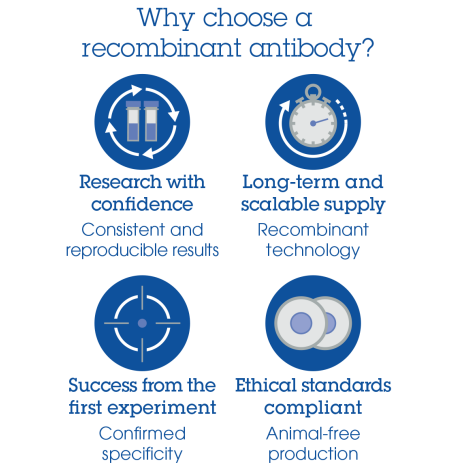
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187139**).




Flow Cytometry (Intracellular) - Anti-HDAC8 antibody [EPR10338(2)] - BSA and Azide free (ab232643)

Intracellular Flow Cytometry analysis of K562 cells labeling HDAC8 using **ab187139** at 1/150 dilution. A Goat anti rabbit IgG (FITC) at 1/150 dilution was used as secondary antibody. Cells were fixed with 2% paraformaldehyde. Isotype control: Rabbit monoclonal IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187139**).




Anti-HDAC8 antibody [EPR10338(2)] - BSA and Azide free (ab232643)



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