abcam

Product datasheet

Anti-HDAC8 antibody [EPR10338(2)] ab187139

KO VALIDATED Recombinant RabMAb

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Overview

Product name	Anti-HDAC8 antibody [EPR10338(2)]
Description	Rabbit monoclonal [EPR10338(2)] to HDAC8
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IP
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa, Molt4 and K562 cell lysates; human kidney tissue lysate; K562 cells.
General notes	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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10338(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab187139 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)		1/150. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/10000 - 1/50000. Predicted molecular weight: 42 kDa.
IP		1/40 - 1/60.

Target

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.

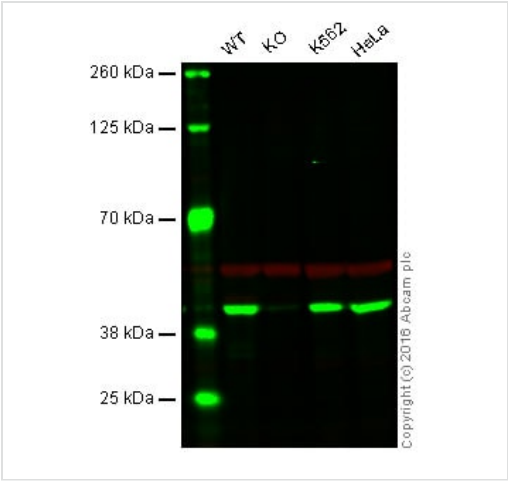
Tissue specificity Weakly expressed in most tissues. Expressed at higher level in heart, brain, kidney and pancreas and also in liver, lung, placenta, prostate and kidney.

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.

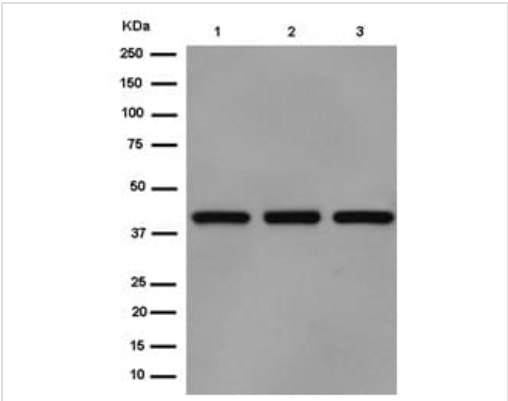
Cellular localization Nucleus. Cytoplasm. Excluded from the nucleoli. Found in the cytoplasm of cells showing smooth muscle differentiation.

Images



Western blot - Anti-HDAC8 antibody [EPR10338(2)] (ab187139)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: HADC8 knockout HAP1 cell lysate (20 µg)
Lane 3: K562 cell lysate (20 µg)
Lane 4: HeLa 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.



Western blot - Anti-HDAC8 antibody [EPR10338(2)] (ab187139)

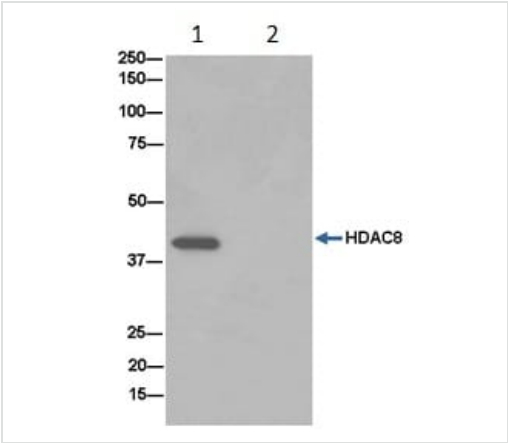
All lanes : Anti-HDAC8 antibody [EPR10338(2)] (ab187139) at 1/50000 dilution

Lane 1 : K562 cell lysate
Lane 2 : Molt4 cell lysate
Lane 3 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

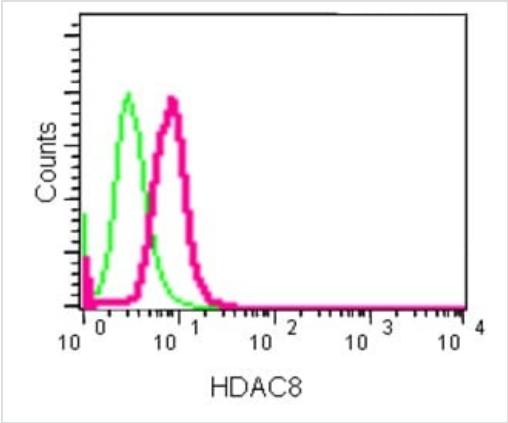
Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa



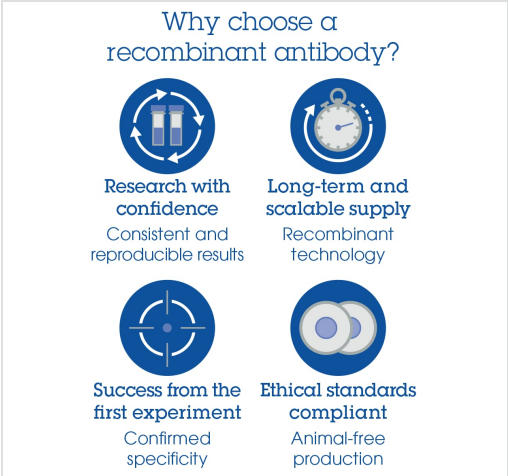
Immunoprecipitation - Anti-HDAC8 antibody [EPR10338(2)] (ab187139)

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.



Flow Cytometry (Intracellular) - Anti-HDAC8 antibody [EPR10338(2)] (ab187139)

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.



Anti-HDAC8 antibody [EPR10338(2)] (ab187139)

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