abcam

Product datasheet

Anti-HDAC6 antibody [EPR6160] - BSA and Azide free ab248542

Recombinant RabMAb

5 Images

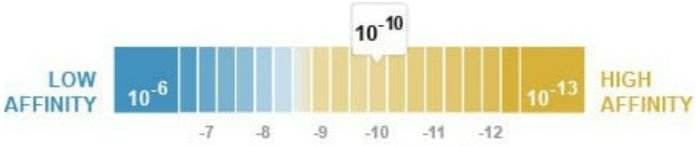
Overview

Product name	Anti-HDAC6 antibody [EPR6160] - BSA and Azide free
Description	Rabbit monoclonal [EPR6160] to HDAC6 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB **Unsuitable for:** Flow Cyt,ICC/IF,IHC-P or IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: 293T, HepG2, K562
General notes	ab248542 is the carrier-free version of **ab133539**. 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	$K_D = 5.31 \times 10^{-10}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Affinity purified
Clonality	Monoclonal
Clone number	EPR6160
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab248542 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 131 kDa.

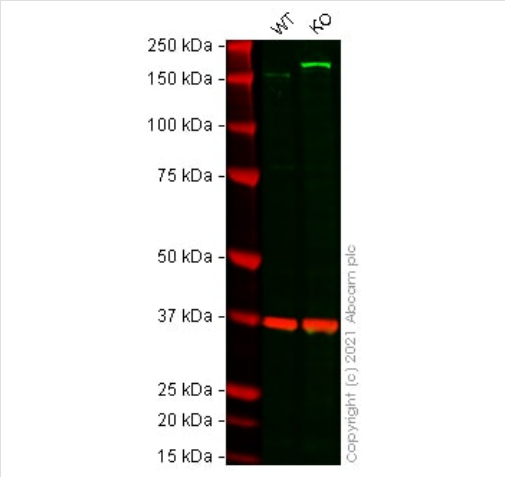
Application notes Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

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 (By similarity). Plays a central role in microtubule-dependent cell motility via deacetylation of tubulin.
Sequence similarities	Belongs to the histone deacetylase family. HD type 2 subfamily. Contains 1 UBP-type zinc finger.
Post-translational modifications	Ubiquitinated. Its polyubiquitination however does not lead to its degradation. Sumoylated in vitro.

Cellular localization	Nucleus. Cytoplasm. It is mainly cytoplasmic, where it is associated with microtubules.

Images



Western blot - Anti-HDAC6 antibody [EPR6160] - BSA and Azide free (ab248542)

All lanes : Anti-HDAC6 antibody [EPR6160] (**ab133539**) at 1/1000 dilution

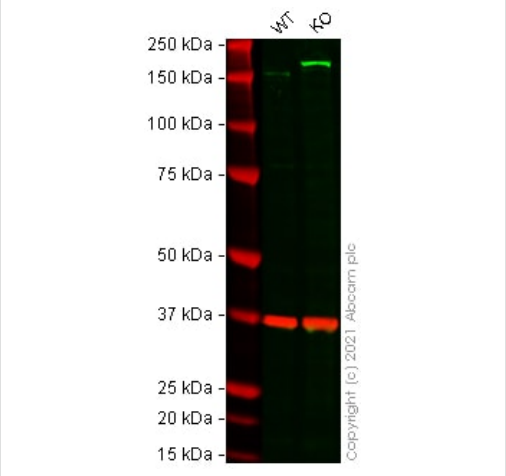
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : HDAC6 CRISPR-Cas9 edited HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 131 kDa
Observed band size: 150 kDa

False colour image of Western blot: Anti-HDAC6 antibody [EPR6160] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab133539** was shown to bind specifically to HDAC6. A band was observed at 150 kDa in wild-type HeLa cell lysates with no signal observed at this size in HDAC6 CRISPR-Cas9 edited cell line **ab264804** (HDAC6 CRISPR-Cas9 edited cell lysate **ab257145**). The band observed in the CRISPR-Cas9 edited lysate lane above 150 kDa is likely to represent HDAC6 with an insertion. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and HDAC6 CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



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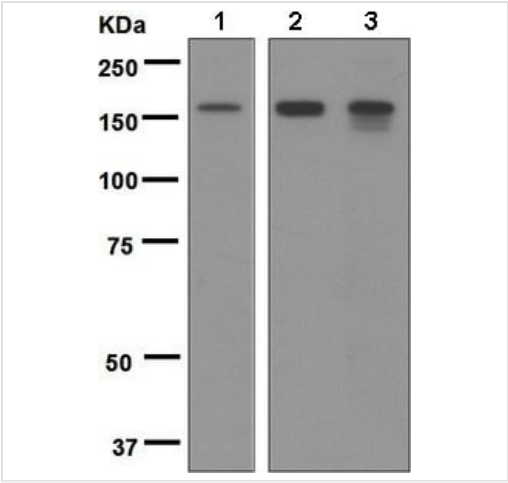

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All lanes : Anti-HDAC6 antibody [EPR6160] (**ab133539**) at 1/1000 dilution

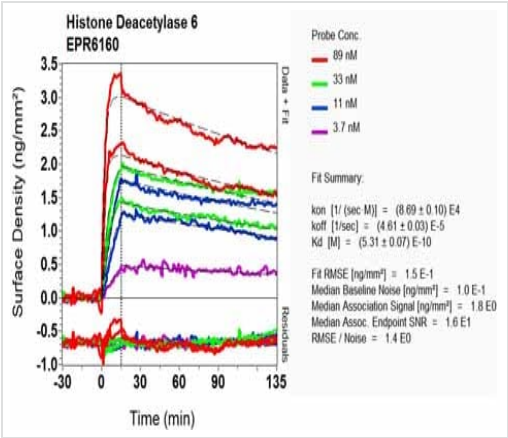
Lane 1 : 293T cell lysate
Lane 2 : HepG2 cell lysate
Lane 3 : K562 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 131 kDa

This data was developed using **ab133539**, the same antibody clone in a different buffer formulation.

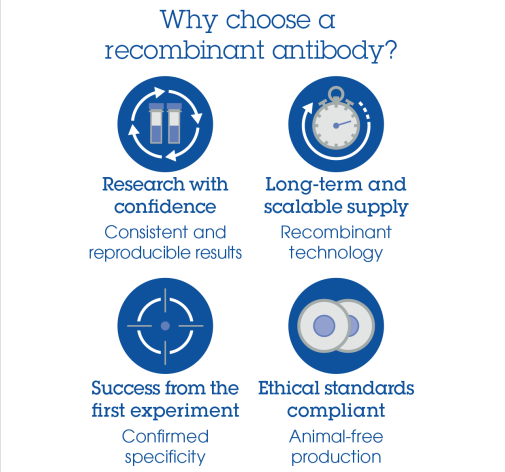


OI-RD Scanning - Anti-HDAC6 antibody [EPR6160] - BSA and Azide free (ab248542)

This data was developed using **ab133539**, the same antibody clone in a different buffer formulation.Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-HDAC6 antibody [EPR6160] - BSA and Azide free (ab248542)

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