abcam

Product datasheet

Anti-HDAC3 antibody [Y415] - BSA and Azide free ab219376

Recombinant RabMAb

10 References 7 Images

Overview

Product name	Anti-HDAC3 antibody [Y415] - BSA and Azide free
Description	Rabbit monoclonal [Y415] to HDAC3 - BSA and Azide free
Host species	Rabbit
Specificity	This antibody may detect splice isoform 2 (RPD3-2A).
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	K562 cell lysate; HeLa cells; human ovary carcinoma
General notes	ab219376 is the carrier-free version of **ab32369**. 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Y415
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab219376 in the following tested applications.

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

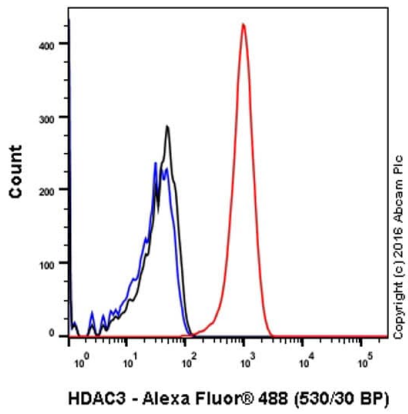
Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 49 kDa (predicted molecular weight: 49 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

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. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1; increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor. Acts as a molecular chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation.
Tissue specificity	Widely expressed.
Sequence similarities	Belongs to the histone deacetylase family. HD type 1 subfamily.

Post-translational modifications	Sumoylated in vitro.
Cellular localization	Nucleus.

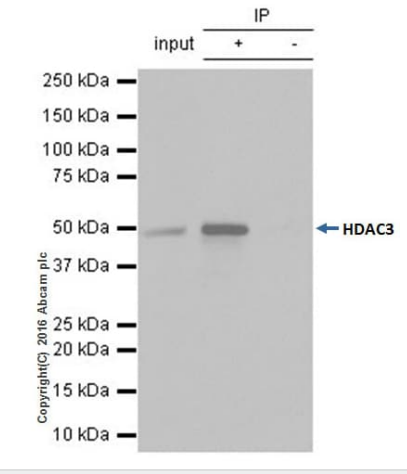
Images



Flow Cytometry (Intracellular) - Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling HDAC3 with purified **ab32369** at 1/30 dilution (10ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor®488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32369**).



Immunoprecipitation - Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

Purified **ab32369** at 1/20 immunoprecipitating HDAC3 in K562 whole cell lysate observed at 49 KDa (lanes 1 and 2).

Lane 1 (input): K562 whole cell lysate 10ug

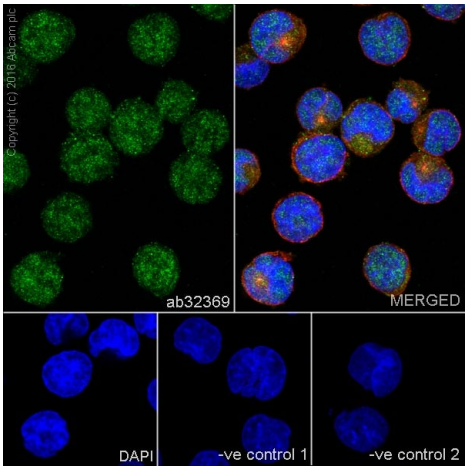
Lane 2 (+): **ab32369** + K562 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab32369** in K562 whole cell lysate

The Detection Reagent used was VeriBlot for IP (HRP) (**ab131366**) at dilution of 1/1000.

Blocking/Diluting buffer 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32369**).

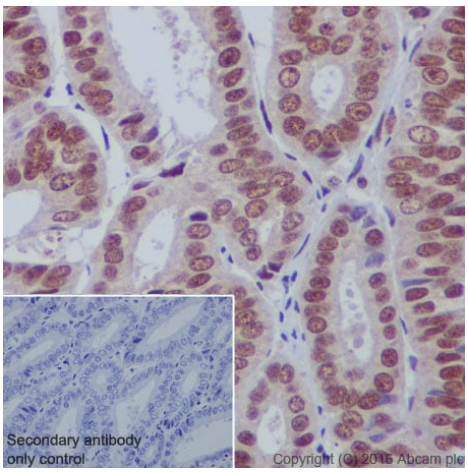


Immunocytochemistry/ Immunofluorescence - Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

Immunocytochemistry/Immunofluorescence analysis of K562 cells labelling HDAC3 with purified **ab32369** at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilized using 0.1% Triton X-100. **ab150077**, Alexa Fluor®488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Cells were co-stained with **ab7291**, a mouse anti-tubulin antibody (1/1000) using **ab150120**, an Alexa Fluor®594-conjugated goat anti-mouse IgG (1/1000) as the secondary. Nuclei were counterstained with DAPI (blue).

For negative control 1, rabbit primary antibody and anti-mouse secondary antibody (**ab150120**) were used and for negative control 2, mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab150077**) were used.

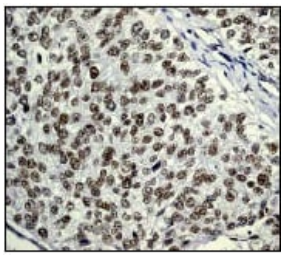
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32369**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

Immunohistochemical analysis of paraffin-embedded human endometrial carcinoma sections labelling HDAC3 with purified **ab32369** at dilution of 1:50. The secondary antibody used was **ab97051**; a goat anti-rabbit IgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32369**).

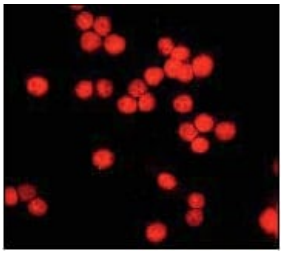


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

Paraffin-embedded human ovary carcinoma
ab32369 at 1/250 dilution

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32369**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

Immunofluorescent staining of HeLa cells
using **ab32369** at 1/250 dilution
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32369**).

Anti-HDAC3 antibody [Y415] - BSA and Azide free (ab219376)

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