

## Product datasheet

### Anti-HDAC3 antibody [Y415] ab32369

Recombinant RabMAb

★★★★★ **6 Abreviews** **49 References** [9 Images](#)

#### Overview

<b>Product name</b>	Anti-HDAC3 antibody [Y415]
<b>Description</b>	Rabbit monoclonal [Y415] to HDAC3
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody may detect splice isoform 2 (RPD3-2A).
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human HDAC3 (C terminal). The exact sequence is proprietary. (Peptide available as <b>ab221015</b> )
<b>Positive control</b>	K562 cell lysate; HeLa cells; human ovary carcinoma
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <b><a href="#">see here</a></b>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb<sup>®</sup> patents</a></b>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.12% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	Y415

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab32369 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)		1/30.
WB	★★★★★ (3)	1/5000 - 1/10000. Detects a band of approximately 49 kDa (predicted molecular weight: 49 kDa).
IHC-P	★★★★★ (3)	1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. <b>For unpurified use at 1/250 - 1/500.</b> See <b><u>IHC antigen retrieval protocols</u></b> .
ICC/IF		1/250 - 1/500.
IP		1/20 - 1/50.

## 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.

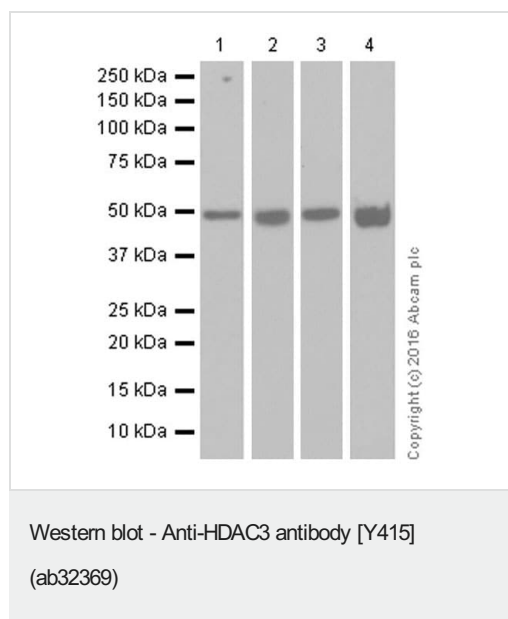
### Post-translational modifications

Sumoylated in vitro.

### Cellular localization

Nucleus.

## Images



**All lanes** : Anti-HDAC3 antibody [Y415] (ab32369) at 1/5000 dilution

**Lane 1** : K562 (human chronic myelogenous leukemia) whole cell lysate

**Lane 2** : HeLa (human cervix adenocarcinoma) whole cell lysate

**Lane 3** : NIH/3T3 (mouse embryo) whole cell lysate

**Lane 4** : C6 (rat glioma) whole cell lysate

Lysates/proteins at 20 µg per lane.

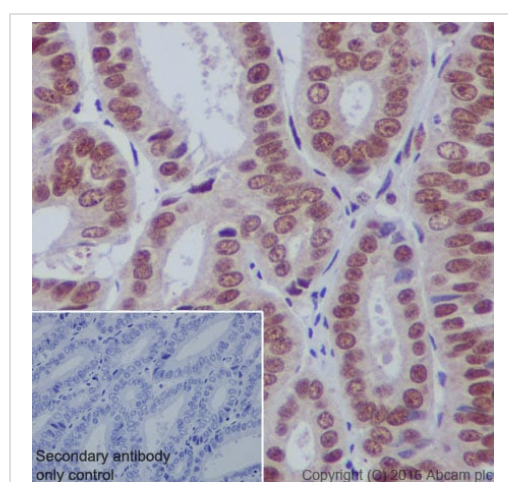
### Secondary

**All lanes** : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

**Predicted band size:** 49 kDa

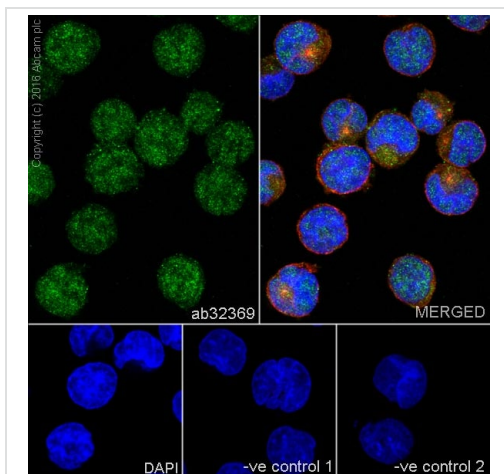
**Observed band size:** 49 kDa

Blocking/Diluting buffer 5% NFDM/TBST



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.

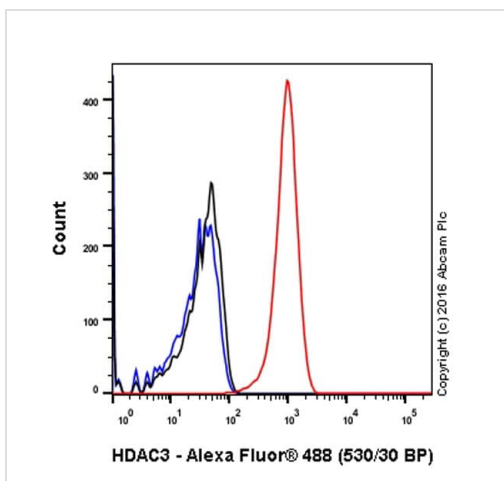
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC3 antibody [Y415] (ab32369)



Immunocytochemistry/ Immunofluorescence - Anti-HDAC3 antibody [Y415] (ab32369)

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.



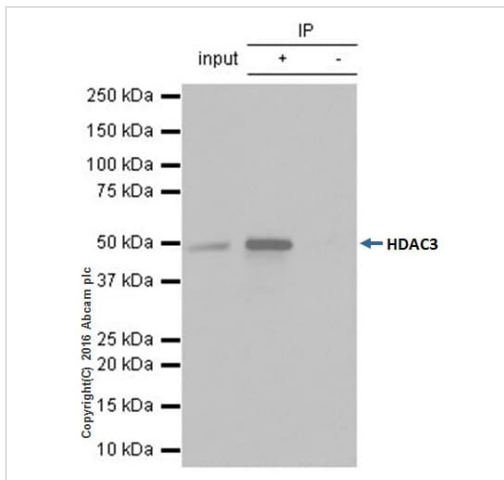
Flow Cytometry (Intracellular) - Anti-HDAC3 antibody [Y415] (ab32369)

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.



Immunocytochemistry/ Immunofluorescence - Anti-HDAC3 antibody [Y415] (ab32369)

Immunofluorescent staining of HeLa cells using ab32369 at 1/250 dilution



Immunoprecipitation - Anti-HDAC3 antibody [Y415]  
(ab32369)

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

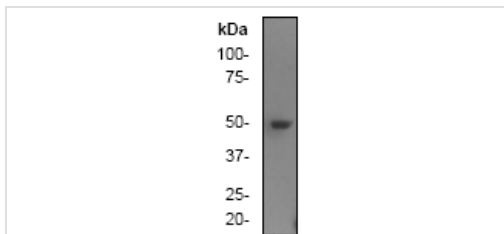
Lane 2 (+): ab32369 + K562 whole cell lysate.

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

The secondary antibody used was VeriBlot for IP Detection

Reagent (HRP) (**ab131366**) for detection at dilution of 1/1000.

Blocking/Diluting buffer 5% NFDM/TBST.

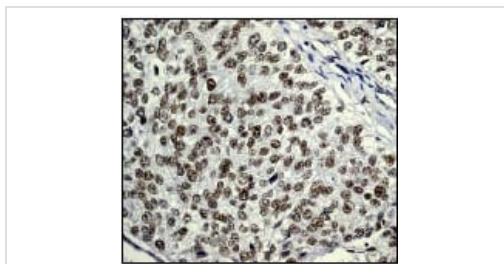


Western blot - Anti-HDAC3 antibody [Y415]  
(ab32369)

Anti-HDAC3 antibody [Y415] (ab32369) at 1/10000 dilution + K562 cell lysate

**Predicted band size:** 49 kDa

**Observed band size:** 49 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC3 antibody [Y415]  
(ab32369)

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

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

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-HDAC3 antibody [Y415] (ab32369)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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