


## Product datasheet

# Anti-HDAC2 antibody ab137364

★★★★☆ [3 Abreviews](#) [4 References](#) [4 Images](#)

### Overview

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<b>Product name</b>	Anti-HDAC2 antibody
<b>Description</b>	Rabbit polyclonal to HDAC2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Chicken, Cow, Xenopus laevis, Xenopus tropicalis 
<b>Immunogen</b>	Recombinant fragment, corresponding to a region within amino acids 145-409 of Human HDAC2.
<b>Positive control</b>	293T, Raji, A431, H1299, HepG2, HeLa, MOLT4 and Mouse brain whole cell lysates; HeLa cells; Human Cal27 Xenograft tissue.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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**The Abpromise guarantee**

Our **Abpromise guarantee** covers the use of ab137364 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	★★★★★ (2)	1/500 - 1/3000. Predicted molecular weight: 55 kDa.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval using heat mediated Tris-EDTA buffer (pH8.0) is also possible.
ICC/IF		1/100 - 1/1000.

**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. Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity.

**Tissue specificity**

Widely expressed; lower levels in brain and lung.

**Sequence similarities**

Belongs to the histone deacetylase family. HD type 1 subfamily.

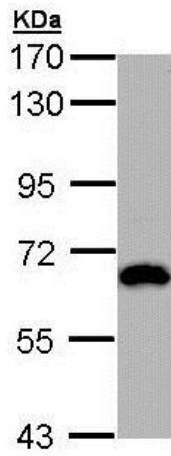
**Post-translational modifications**

S-nitrosylated by GAPDH. In neurons, S-Nitrosylation at Cys-262 and Cys-274 does not affect the enzyme activity but abolishes chromatin-binding, leading to increases acetylation of histones and activate genes that are associated with neuronal development. In embryonic cortical neurons, S-Nitrosylation regulates dendritic growth and branching.

**Cellular localization**

Nucleus.

**Images**

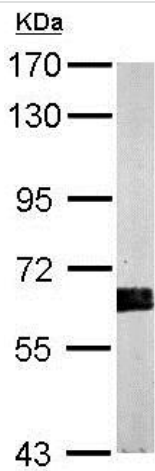


Western blot - Anti-HDAC2 antibody (ab137364)

Anti-HDAC2 antibody (ab137364) at 1/1000 dilution + Raji whole cell lysate at 30  $\mu$ g

**Predicted band size:** 55 kDa

7.5% SDS PAGE

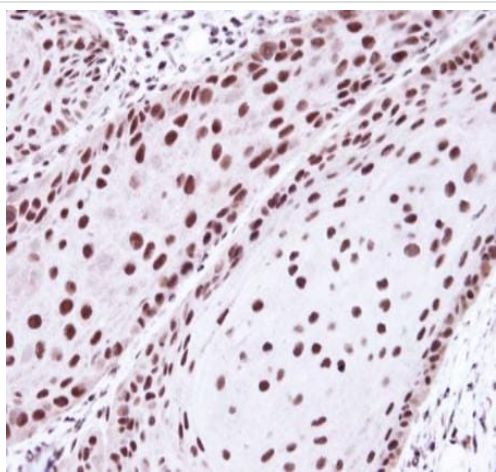


Western blot - Anti-HDAC2 antibody (ab137364)

Anti-HDAC2 antibody (ab137364) at 1/1000 dilution + Mouse brain whole cell lysate at 50  $\mu$ g

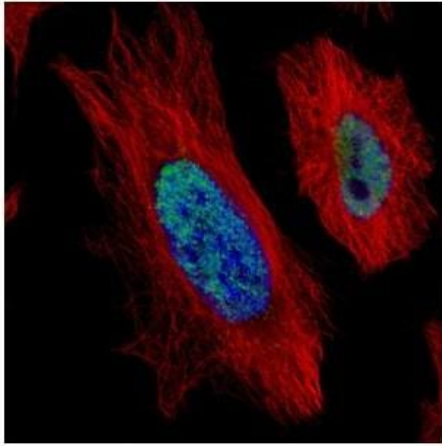
**Predicted band size:** 55 kDa

7.5% SDS PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC2 antibody (ab137364)

Immunohistochemical analysis of paraffin-embedded Human Cal27 Xenograft tissue labelling HDAC2 with ab137364 at 1/100 dilution.



Confocal immunofluorescence analysis of paraformaldehyde-fixed HeLa cells labelling HDAC2 with ab137364 (green) at 1/500 dilution. Alpha-tubulin filaments were labeled with an anti-alpha tubulin antibody (red) at 1/2500.

Immunocytochemistry/ Immunofluorescence - Anti-HDAC2 antibody (ab137364)

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

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