abcam

Product datasheet

Anti-HDAC2 antibody [HDAC2-62] ab12169

★★★★★ 6 Abreviews 75 References 3 Images

Overview

Product name	Anti-HDAC2 antibody [HDAC2-62]
Description	Mouse monoclonal [HDAC2-62] to HDAC2
Host species	Mouse
Tested applications	**Suitable for:** IP, WB
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide: SGEKTDTKGTKSEQLSNP with N-terminally added Cysteine conjugated to KLH, corresponding to amino acids 471-488 of Human HDAC2. Run BLAST with Run BLAST with
Positive control	Whole cell extracts from NIH-3T3 cells.
General notes	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. 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&As

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: 0.0268% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	HDAC2-62

Isotype	IgG2b

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab12169 in the following tested applications.

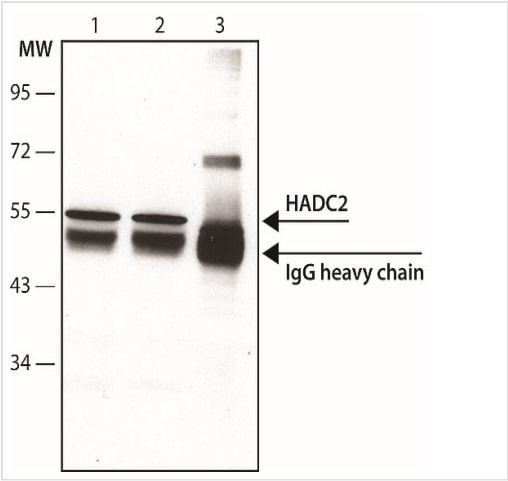
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB	★★★★★ (3)	Use a concentration of 0.25 - 0.5 µg/ml. Detects a band of approximately 55 kDa.

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

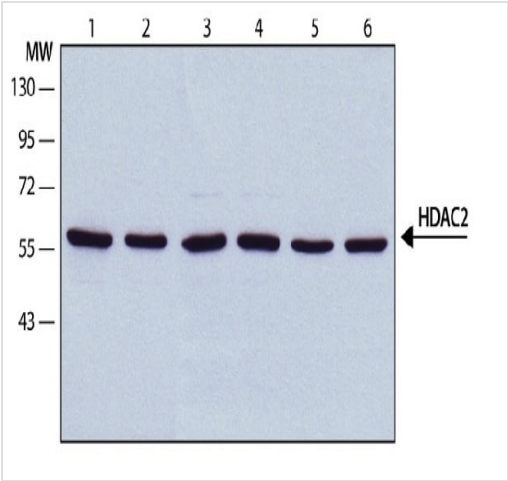


Immunoprecipitation - Anti-HDAC2 antibody [HDAC2-62] (ab12169)

Western Blot using Rabbit anti-HDAC2

Lane 1 : Anti-HDAC2 antibody [HDAC2-62] (ab12169) at 5 µg
Lane 2 : Anti-HDAC2 antibody [HDAC2-62] (ab12169) at 2.5 µg
Lane 3 : Negative Control at 5 µg

All lanes : HeLa whole cell extract



Western blot - Anti-HDAC2 antibody [HDAC2-62] (ab12169)

All lanes : Anti-HDAC2 antibody [HDAC2-62] (ab12169) at 0.5 µg/ml

Lane 1 : Hek293T cell Lysate
Lane 2 : HeLa cell Lysate
Lane 3 : Jurkat cell Lysate
Lane 4 : K562 cell Lysate
Lane 5 : Neuro-2a cell Lysate
Lane 6 : NIH-3T3 cell Lysate

Secondary
All lanes : Goat Anti-Mouse IgG-Peroxidase

Western blot - Anti-HDAC2 antibody [HDAC2-62] (ab12169)
This image is courtesy of an anonymous abreview.

Anti-HDAC2 antibody [HDAC2-62] (ab12169) at 1/250 dilution + Human glioblastoma cell line at 120 µg

Secondary
HRP-conjugated Goat anti-Mouse at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Observed band size: 55 kDa
Additional bands at: 45 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 5 minutes

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