abcam

Product datasheet

Anti-HDAC1 antibody [mAbcam 68436] - Nuclear Loading Control ab68436

1 Abreviews 2 References 1 Image

Overview

Product name Anti-HDAC1 antibody [mAbcam 68436] - Nuclear Loading Control

Description Mouse monoclonal [mAbcam 68436] to HDAC1 - Nuclear Loading Control

Host species Mouse

Tested applications Suitable for: WB Species reactivity Reacts with: Mouse

Predicted to work with: Rat, Cow, Human, Orangutan

Immunogen Synthetic peptide corresponding to Human HDAC1 aa 450 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab20434)

Positive control WB: IOUD2 Whole Cell Lysate.

General notes This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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 guestions, 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 long

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Purity Protein G purified

Clonality Monoclonal

Clone numbermAbcam 68436MyelomaSp2/0-Ag14

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab68436 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 a concentration of 5 µg/ml. Detects a band of approximately 60 kDa (predicted molecular weight: 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. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREST-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates 'Lys-310' in RELA and thereby inhibits the transcriptional activity of NF-kappa-B.

Tissue specificity

Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain.

Sequence similarities

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

Post-translational modifications

 $Sum oy lated \ on \ Lys-444 \ and \ Lys-476; \ which \ promotes \ enzymatic \ activity. \ Desumoy lated \ by$

SENP1.

 $Phosphory lation \ on \ Ser-421 \ and \ Ser-423 \ promotes \ enzymatic \ activity \ and \ interactions \ with \ NuRD$

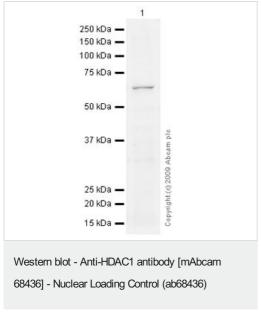
and SIN3 complexes.

Ubiquitinated by CHFR, leading to its degradation by the proteasome.

Cellular localization

Nucleus.

Images



Anti-HDAC1 antibody [mAbcam 68436] - Nuclear Loading Control (ab68436) at 5 μ g/ml + IOUD2 Whole Cell Lysate at 20 μ g

Secondary

Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 60 kDa

Exposure time: 1 minute

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

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