


Product datasheet

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

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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	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <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&As</p>

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 term.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide
Purity	Protein G purified
Clonality	Monoclonal

Clone number	mAbcam 68436
Myeloma	Sp2/0-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 Sumoylated on Lys-444 and Lys-476; which promotes enzymatic activity. Desumoylated by SENP1.

Phosphorylation 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



Western blot - Anti-HDAC1 antibody [mAbcam 68436] - Nuclear Loading Control (ab68436)

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

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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