



Product datasheet

Anti-HDAC1 antibody - ChIP Grade ab1767

15 References

Overview

Product name	Anti-HDAC1 antibody - ChIP Grade
Description	Rabbit polyclonal to HDAC1 - ChIP Grade
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, ChIP, IP, IHC - Wholmount
Species reactivity	Reacts with: Drosophila melanogaster
Immunogen	Synthetic peptide: C-SGSGTGSGAGAKGAKENNI , corresponding to amino acids 503-521 of Fruit fly (Drosophila melanogaster) HDAC1  Run BLAST with  Run BLAST with
General notes	<p>The SIN3/RPD3 deacetylase complex is essential for G(2) phase cell cycle progression and regulation of SMRTER corepressor levels.</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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.02% Sodium azide
Purity	Whole antiserum
Primary antibody notes	The SIN3/RPD3 deacetylase complex is essential for G(2) phase cell cycle progression and regulation of SMRTER corepressor levels.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab1767 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 at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
ChIP		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC - Wholemount		Use at an assay dependent concentration. PubMed: 22195015

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.

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