

HDAC1 polyclonal antibody - Classic

Purified mouse Polyclonal Antibody

Catalog # ADN10258

Specification

HDAC1 polyclonal antibody - Classic - Product Information

Application	CHIP, WB
Primary Accession	Q13547
Reactivity	Human
Host	Mouse
Clonality	Polyclonal
Calculated MW	55103

HDAC1 polyclonal antibody - Classic - Additional Information

Gene ID 3065

Other Names

Histone deacetylase 1, HD1, 3.5.1.98, HDAC1, RPD3L1

Target/Specificity

HDAC1

Precautions

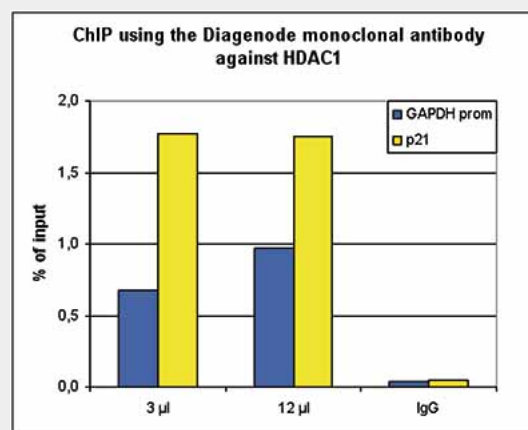
HDAC1 polyclonal antibody - Classic is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC1 polyclonal antibody - Classic - Protein Information

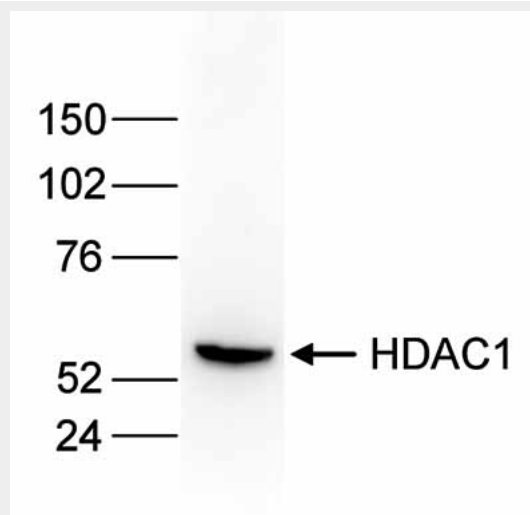
Name HDAC1 ([HGNC:4852](#))

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



ChIP assays were performed using human HeLa cells, the Diagenode monoclonal antibody against HDAC1 (Cat. No. ADN10258) and optimized PCR primer sets for qPCR. ChIP was performed with the "LowCell# ChIP" kit (Cat. No. C01010070), using sheared chromatin from 10,000 cells. Two different quantities of antibody (3 and 12 µl per ChIP experiment) were analysed. IgG (1 µg/IP) was used as negative IP control. QPCR was performed with primers for the GAPDH promoter and for the coding region of p21, a known target gene of HDAC1. Figure 1 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).



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. Deacetylates NR1D2 and abrogates the effect of KAT5-mediated relieving of NR1D2 transcription repression activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Involved in CIART-mediated transcriptional repression of the circadian transcriptional activator: CLOCK-ARNTL/BMAL1 heterodimer. Required for the transcriptional repression of circadian target genes, such as PER1, mediated by the large PER complex or CRY1 through histone deacetylation.

Cellular Location

Nucleus.

Tissue Location

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

Nuclear extracts from HeLa cells (40 µg) were analysed by Western blot using the Diagenode monoclonal antibody against HDAC1 (Cat. No. ADN10258) diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right (expected size: 55 kDa); the marker (in kDa) is shown on the left.

HDAC1 polyclonal antibody - Classic - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)