

Datasheet for ABIN3031222 anti-HDAC1 antibody (AA 449-482)





Overview

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Quantity:	0.4 mL
Target:	HDAC1
Binding Specificity:	AA 449-482
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HDAC1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF)
Product Details	
Immunogen:	A portion of amino acids 449-482 from the human protein was used as the immunogen for this HDAC1 antibody.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Mouse
Purification:	Purified
Target Details	
Target:	HDAC1
Alternative Name:	HDAC1 (HDAC1 Products)
Background:	HDAC1 is 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. 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. [UniProt]

UniProt:

Q13547

Pathways:

Neurotrophin Signaling Pathway, Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Mitotic G1-G1/S Phases, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Negative Regulation of intrinsic apoptotic Signaling, Embryonic Body Morphogenesis

Titration of the HDAC1 antibody may be required due to differences in protocols and

Application Details

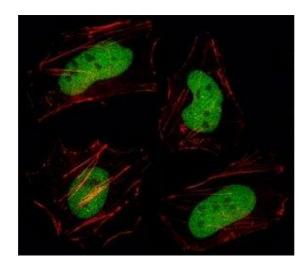
Application Notes:

	secondary/substrate sensitivity.\. Western blot: 1:1000-2000,Immunofluorescence: 1:10-1:50
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	In 1X PBS, pH 7.4, with 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

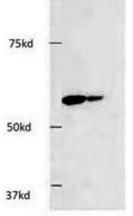
Storage:	-20 °C
Storage Comment:	Aliquot the HDAC1 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw
	cycles.

Images



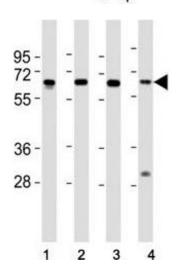
Immunofluorescence

Image 1. Fluorescent image of HeLa cell stained with HDAC1 antibody at 1:25. Immunoreactivity is localized to the nucleus.



Western Blotting

Image 2. Western blot testing of HDAC1 antibody and HEK293 cells. Knockdown using siRNA showed a significant decrease of specific protein. Predicted molecular weight ~60 kDa



Western Blotting

Image 3. Western blot testing of HDAC1 antibody at 1:2000 dilution. Lane 1: HeLa lysate; 2: Jurkat lysate; 3: K562 lysate;
4: mouse thymus lysate; Predicted molecular weight ~60 kDa

Please check the product details page for more images. Overall 5 images are available for ABIN3031222.