

Datasheet for ABIN6255318
anti-HDAC1 antibody (pSer421)



[Go to Product page](#)

3 Images

Overview

Quantity:	100 µL
Target:	HDAC1
Binding Specificity:	pSer421
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HDAC1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human HDAC1 around the phosphorylation site of Ser421.
Isotype:	IgG
Specificity:	Phospho-HDAC1 (Ser421) Antibody detects endogenous levels of HDAC1 only when phosphorylated at Serine 421.
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Target Details

Target:	HDAC1
Alternative Name:	HDAC1 (HDAC1 Products)

Target Details

Background:	<p>Description: 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.</p> <p>Gene: HDAC1</p>
-------------	--

Molecular Weight:	62kDa
Gene ID:	3065
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

Application Details

Application Notes:	WB 1:500-1:2000, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

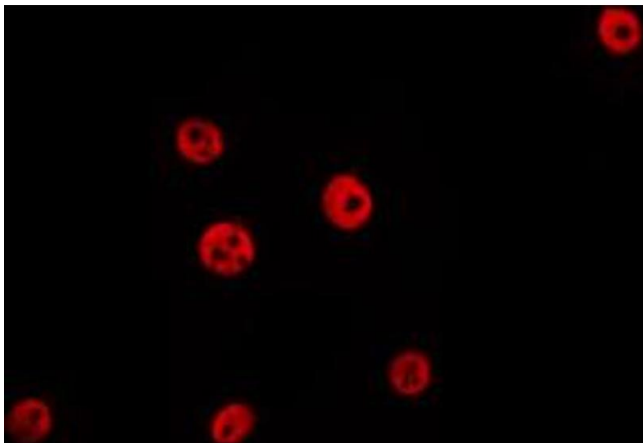
Handling

Format:	Liquid
Concentration:	1 mg/mL

Handling

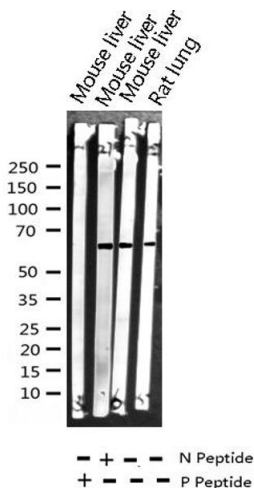
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



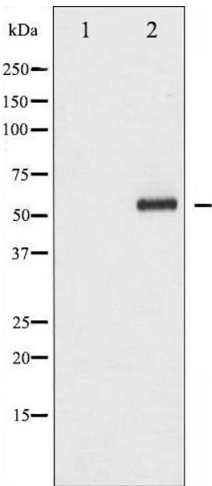
Immunofluorescence (fixed cells)

Image 1. ABIN6267642 staining Hela by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



Western Blotting

Image 2. Western blot analysis of Phospho-HDAC1 (Ser421) expression in various lysates



Western Blotting

Image 3. Western blot analysis of HDAC1 phosphorylation expression in EGF treated Jurkat whole cell lysates, The lane on the left is treated with the antigen-specific peptide.