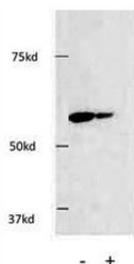


HDAC1 Antibody (F41123)

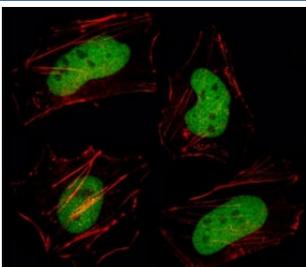
Catalog No.	Formulation	Size
F41123-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F41123-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

[Bulk quote request](#)

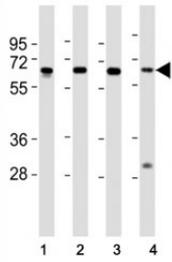
Availability	1-3 business days
Species Reactivity	Human, Mouse
Predicted Reactivity	Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q13547
Applications	Western Blot : 1:1000-2000 Immunofluorescence : 1:10-1:50
Limitations	This HDAC1 antibody is available for research use only.



HDAC1 Antibody Knockdown WB. Western blot analysis of HEK293 cell lysates using HDAC1 antibody following siRNA-mediated knockdown of HDAC1 expression. A marked reduction in the approximately 55-60 kDa band is observed in knockdown-treated cells compared to control cells, supporting specific detection of Histone deacetylase 1 / HDAC1.



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



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 55~60 kDa

Description

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]

Application Notes

Titration of the HDAC1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 449-482 from the human protein was used as the immunogen for this HDAC1 antibody.

Storage

Aliquot the HDAC1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.