ARG20180
anti-HDAC1 antibody

Package: 50 µg, 25 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HDAC1
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, IP, WB
Specificity	The antibody detects the 62 kDa histone deacetylase 1. It does not cross-react with other HDAC proteins including HDAC2, 3, 4, 5, 6, 7, and 8.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HDAC1
Species	Human
Immunogen	Synthetic peptide corresponding to the C-terminus of human HDAC1
Conjugation	Un-conjugated
Alternate Names	EC 3.5.1.98; HD1; RPD3L1; Histone deacetylase 1; GON-10; RPD3

Application Instructions

Application table

Application	Dilution
IHC-P	10-20 µg/ml
IP	10-20 µg/ml
WB	0.5-4 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

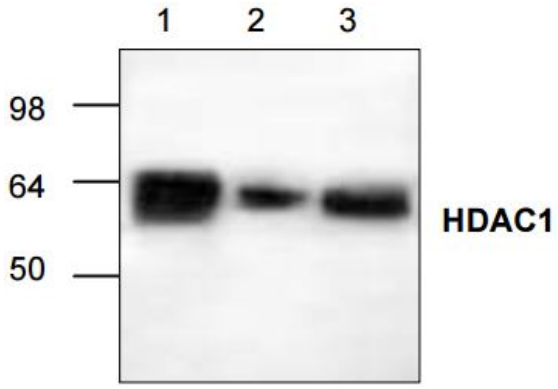
Form	Liquid
Purification	Affinity Purified Antibody
Buffer	PBS (pH 7.2), 30% Glycerol, 0.5% BSA and 0.01% Thimerosal
Preservative	0.01% Thimerosal
Stabilizer	30% Glycerol, 0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	HDAC1
Gene Full Name	histone deacetylase 1
Background	HDAC1 is an active component of transcriptional corepressor complexes which can be recruited to specific promoter regions via transcriptional factors. HDAC1 catalyzes removal of acetyl-groups from acetyl-lysines of histones and promotes compaction of chromatin in these regions, which leads to the inhibition of gene transcription.
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. 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]
Calculated Mw	55 kDa

Images



ARG20180 anti-HDAC1 antibody WB image

Western Blot: 1. Mouse small intestine tissue lysate 2. Jurkat cell lysate 3. Rat kidney tissue lysate stained with anti-HDAC1 antibody (ARG20180).

The antibody detects the 62 kDa histone deacetylase 1. It does not cross-react with other HDAC proteins includi ng HDAC2, 3, 4, 5, 6, 7, and 8.