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Goat Anti-Hdac2 (mouse) Antibody

Peptide-affinity purified goat antibody
Catalog # AF4331a

Product Information

Application	WB, IF, FC, Pep-ELISA
Primary Accession	P70288
Other Accession	NP_032255.2
Reactivity	Human, Mouse
Host	Goat
Clonality	Polyclonal
Clone Names	Hdac2
Calculated MW	55302

Additional Information

Gene ID	15182
Other Names	D10Wsu179e, HD2, histone deacetylase 2, mRPD3, OTTMUSP00000022803, YAF1, YY1 transcription factor-binding protein, Yy1bp, Hdac2
Dilution	WB~~1:1000 IF~~1:50~200 FC~~1:10~50 Pep-ELISA~~N/A
Format	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.
Immunogen	Peptide with sequence C-PEDAVHEDSGDE, from the internal region of the protein sequence according to NP_032255.2.
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Goat Anti-Hdac2 (mouse) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Hdac2 {ECO:0000312|MGI:MGI:1097691}
Synonyms	Yy1bp
Function	Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed:18754010). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (PubMed:18754010). Histone

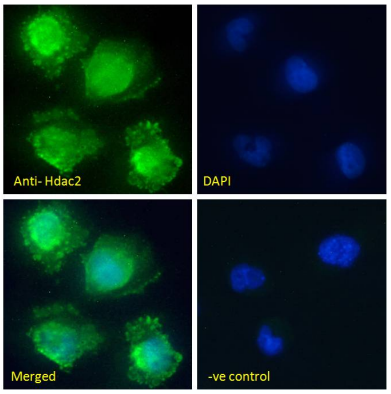
deacetylases act via the formation of large multiprotein complexes (PubMed:18754010). Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR (By similarity). Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development (PubMed:17707228). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (By similarity). Component of the SIN3B complex that represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (By similarity). Also deacetylates non-histone targets: deacetylates TSHZ3, thereby regulating its transcriptional repressor activity (By similarity). May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation (PubMed:15226430). Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A (PubMed:20071335). In addition to protein deacetylase activity, also acts as a protein-lysine deacylase by recognizing other acyl groups: catalyzes removal of (2E)-butenoyl (crotonyl), lactoyl (lactyl) and 2-hydroxyisobutanoyl (2-hydroxyisobutyryl) acyl groups from lysine residues, leading to protein decrotonylation, delactylation and de-2-hydroxyisobutyrylation, respectively (PubMed:30279482).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q92769}. Cytoplasm {ECO:0000250|UniProtKB:Q92769}

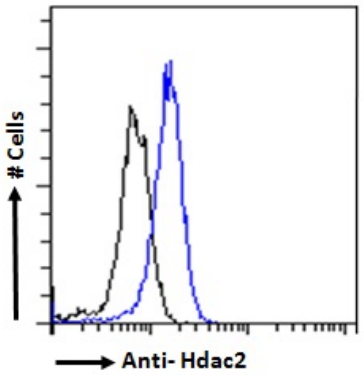
Images

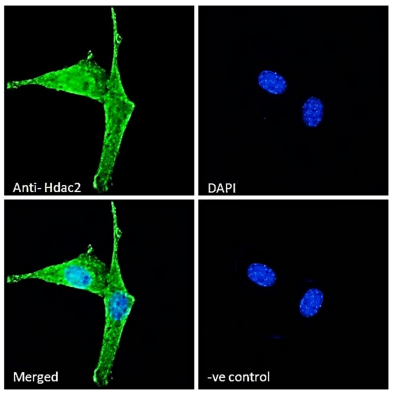
AF4331a (1 µg/ml) staining of HEK293 nuclear cell lysate. (35 µg protein in RIPA buffer). Detected by chemiluminescence.



AF4331a Immunofluorescence analysis of paraformaldehyde fixed U251 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear staining. The nuclear stain is DAPI (blue)

AF4331a Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml). IgG control: Unimmunized goat IgG (black line) fol





AF4331a Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane, cytoplasmic and nuclear staining. The