

Rabbit HDAC2 Polyclonal Antibody | anti-HDAC2 antibody

Phospho-HDAC2 (Ser394) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321758	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

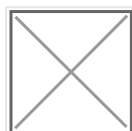
PRODUCT SYNONYMS

HDAC2; Polyclonal Antibody; Phospho-HDAC2 (Ser394) Antibody; D10Wsu179e; HD 2; HD2; HDAC 2; Hdac2; HDAC2_HUMAN; Histone deacetylase 2 (HD2); Histone deacetylase 2; OTTHUMP00000017046; OTTHUMP00000227077; OTTHUMP00000227078; RPD3; transcriptional regulator homolog RPD3; YAF1; YY1 associated factor 1; YY1 transcription factor binding protein; Yy1bp; anti-HDAC2 antibody

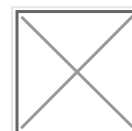
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-HDAC2 (Ser394) antibody detects endogenous levels of HDAC2 only when phosphorylated at Serine 394
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	488
Applicable Applications for anti-HDAC2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human HDAC2 around the phosphorylation site of Serine 394
Subcellular Location	Nucleus.
Tissue Specificity	Widely expressed; lower levels in brain and lung.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit, Chicken, Xenopus
Similarity	Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Chicken (100%), Xenopus (82%)
Conjugation	Unconjugated
Epitope	Phospho Ser394
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES


WB (Western Blot)

Western blot analysis of Phospho-HDAC2 (Ser394) expression in various lysates


WB (Western Blot)

Western blot analysis of extracts from rat spleen, using Phospho-HDAC2 (Ser394) Antibody.



WB (Western Blot)

Western blot analysis of HDAC2 phosphorylation expression in NIH-3T3 whole cell lysates. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA321758 staining HeLa cells 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 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-HDAC2 antibody

Description: HDAC2 a transcriptional regulator of the histone deacetylase family, subfamily 1. Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation plays a role in epigenetic repression and transcriptional regulation, cell cycle progression and developmental events.

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. Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor 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. May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation. Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A.

Subunit Structure: Part of the core histone deacetylase (HDAC) complex composed of HDAC1, HDAC2, RBBP4 and RBBP7. The core complex associates with MTA2, MBD3, MTA1L1, CHD3 and CHD4 to form the nucleosome remodeling and histone deacetylation (NuRD) complex, or with SIN3, SAP18 and SAP30 to form the SIN3 HDAC complex. Component of a RCOR/GFI/KDM1A/HDAC complex. Interacts directly with GFI1 and GFI1B. Interacts with SNW1, HDAC7, PRDM6, SAP30, SETDB1 and SUV39H1. Interacts with the H2AFY (via the non-histone region). Component of a BHC histone deacetylase complex that contains HDAC1, HDAC2, HMG20B, KDM1A, RCOR1 and PHF21A. The BHC complex may also contain ZMYM2, ZNF217, ZMYM3, GSE1 and GTF2I. Part of a complex containing the core histones H2A, H2B, H3 and H4, DEK and unphosphorylated DAXX. Part of a complex containing ATR and CHD4. Forms a heterologous complex at least with YY1. Interacts with ATR, CBFA2T3, DNMT1, MINT, HDAC10, HCFC1, NRIP1, KDM4A and PELP1. Component of a mSin3A corepressor complex that contains SIN3A, SAP130, SUDS3, ARID4B, HDAC1 and HDAC2. Interacts with CHFR and SAP30L. Interacts (CK2 phosphorylated form) with SP3. Interacts with TSHZ3 (via its N-terminus). Interacts with APEX1; the interaction is not dependent on the acetylated status of APEX1. Part of a complex composed of TRIM28, HDAC1, HDAC2 and EHMT2. Interacts with PIMREG. Interacts with BCL6 (non-acetylated form). Part of a complex containing at least CDYL, MIER1, MIER2, HDAC1 and HDAC2. Interacts with CRY1, INSM1 and ZNF431. Interacts with NACC2. Interacts with MTA1, with a preference for sumoylated MTA1. Interacts with SIX3 (By similarity). Interacts with BEND3. Component of a histone deacetylase complex containing DNMT1, ZNF541, HDAC1 and HDAC2 (PubMed:21573134).

Post-translational Modifications: S-nitrosylated by GAPDH. In neurons, S-Nitrosylation at Cys-262 and Cys-274 does not affect the enzyme activity but abolishes chromatin-binding, leading to increases acetylation of histones and activate genes that are associated with neuronal development. In embryonic cortical neurons, S-Nitrosylation regulates dendritic growth and branching.

Similarity: Belongs to the histone deacetylase family. HD type 1 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	293336691
NCBI GeneID	3066
NCBI Accession #	NP_001518.3
NCBI GenBank Nucleotide #	NM_001527.3
UniProt Accession #	Q92769; Q5SR18; Q5SZ86; Q8NEH4; B3KRS5; B4DL58; E1P561

Molecular Weight	Observed: 55 kDa Predicted: 56 kDa
NCBI Official Full Name	histone deacetylase 2
NCBI Official Synonym Full Names	histone deacetylase 2
NCBI Official Symbol	HDAC2
NCBI Official Synonym Symbols	HD2; RPD3; YAF1
NCBI Protein Information	histone deacetylase 2
UniProt Protein Name	Histone deacetylase 2
UniProt Gene Name	HDAC2
UniProt Synonym Gene Names	HD2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hdac2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/321758>