

Rabbit HDAC3 Polyclonal Antibody | anti-HDAC3 antibody

HDAC3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321214	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

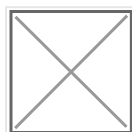
PRODUCT SYNONYMS

HDAC3; Polyclonal Antibody; HDAC3 Antibody; HD3; HDAC 3; HDAC3_HUMAN; Histone deacetylase 3; RPD3 2; RPD3; RPD3-2; SMAP45; anti-HDAC3 antibody

PRODUCT SPECIFICATIONS

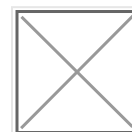
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	HDAC3 antibody detects endogenous levels of HDAC3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	428
Applicable Applications for anti-HDAC3 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human HDAC3
Subcellular Location	Nucleus.
Tissue Specificity	Widely expressed.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA321214 staining NIH 3T3 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.



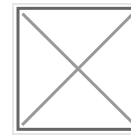
IF (Immunofluorescence)

AAA321214 staining NIH-3T3 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) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA321214 at 1/100 staining human brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis on NIH-3T3 cell lysate using HDAC3 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-HDAC3 antibody

Description: Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family. It has histone deacetylase activity and represses transcription when tethered to a promoter. It may participate in the regulation of transcription through its binding with the zinc-finger transcription factor YY1. This protein can also down-regulate p53 function and thus modulate cell growth and apoptosis. This gene is regarded as a potential tumor suppressor gene.

Function: Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4), and some other non-histone substrates. 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. Participates in the BCL6 transcriptional repressor activity by deacetylating the H3 'Lys-27' (H3K27) on enhancer elements, antagonizing EP300 acetyltransferase activity and repressing proximal gene expression. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1; increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor. Acts as a molecular chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation (PubMed:21444723, PubMed:23911289). Contributes, together with XBP1 isoform 1, to the activation of NFE2L2-mediated HMOX1 transcription factor gene expression in a PI3K/mTORC2/Akt-dependent signaling pathway leading to endothelial cell (EC) survival under disturbed flow/oxidative stress (PubMed:25190803).

Subunit Structure: Interacts with HDAC7 and HDAC9. Forms a heterologous complex at least with YY1. Interacts with DAXX, HDAC10 and DACH1. Found in a complex with NCOR1 and NCOR2. Component of the N-Cor repressor complex, at least composed of NCOR1, NCOR2, HDAC3, TBL1X, TBL1R, CORO2A and GPS2. Interacts with BCOR, MJD2A/JHDM3A, NRIP1, PRDM6 and SRY. Interacts with BTBD14B. Interacts with GLIS2. Interacts (via the DNA-binding domain) with NR2C1; the interaction recruits phosphorylated NR2C1 to PML bodies for sumoylation. Component of the Notch corepressor complex. Interacts with CBFA2T3 and NKAP. Interacts with APEX1; the interaction is not dependent on the acetylated status of APEX1. Interacts with and deacetylates MAPK14. Interacts with ZMYND15. Interacts with SMRT/NCOR2 and BCL6 on DNA enhancer elements. Interacts with INSM1 (PubMed:10655483, PubMed:10669754, PubMed:10860984, PubMed:10898795, PubMed:11006275, PubMed:11466315, PubMed:11533236, PubMed:11861901, PubMed:14525983, PubMed:14633989, PubMed:15297880, PubMed:15927959, PubMed:16569215, PubMed:18417529, PubMed:19409814, PubMed:23911289). Interacts with XBP1 isoform 1; the interaction occurs in endothelial cell (EC) under disturbed flow (PubMed:25190803). Interacts (via C-terminus) with CCAR2 (via N-terminus). Interacts with and deacetylates MEF2D. Interacts with BEND3. Interacts with NKAPL (By similarity).

Post-translational Modifications: Sumoylated in vitro.

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

NCBI AND UNIPROT INFORMATION

NCBI GI #	13128862
NCBI GeneID	8841
NCBI Accession #	NP_003874.2
NCBI GenBank Nucleotide #	NM_003883.3
UniProt Accession #	O15379 ; O43268 ; Q9UEI5 ; Q9UEV0 ; D3DQE1
Molecular Weight	Observed: 50 kDa Predicted: 49 kDa

NCBI Official Full Name	histone deacetylase 3 isoform 2
NCBI Official Synonym Full Names	histone deacetylase 3
NCBI Official Symbol	HDAC3
NCBI Official Synonym Symbols	HD3; RPD3; RPD3-2
NCBI Protein Information	histone deacetylase 3
UniProt Protein Name	Histone deacetylase 3
UniProt Gene Name	HDAC3
UniProt Synonym Gene Names	HD3

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/hdac3-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/321214>