

Product Name: Histone deacetylase 1 Rabbit Polyclonal Antibody**Catalog #: APRab12046**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	55kDa

Antigen Information

Gene Name	HDAC1
Alternative Names	HDAC1; RPD3L1; Histone deacetylase 1; HD1
Gene ID	3065.0
SwissProt ID	Q13547
Immunogen	The antiserum was produced against synthesized peptide derived from human HDAC1. AA range:433-482

Background

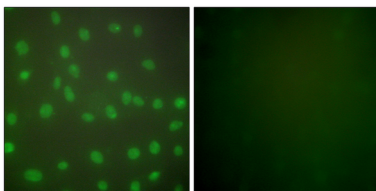
Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic

gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis. [provided by RefSeq, Jul 2008],catalytic activity:Hydrolysis of an N(6)-acetyl-lysine residue of a histone to yield a deacetylated histone.,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.,PTM:Phosphorylation on Ser-421 and Ser-423 promotes enzymatic activity and interactions with NuRD and SIN3 complexes.,PTM:Sumoylated on Lys-444 and Lys-476; which promotes enzymatic activity. Desumoylated by SENP1.,similarity:Belongs to the histone deacetylase family. Type 1 subfamily.,subunit:Part of the core histone deacetylase (HDAC) complex composed of HDAC1, HDAC2, RBBP4 and RBBP7. The core complex associates with MTA2, MBD2, 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 BHC histone deacetylase complex that contains HDAC1, HDAC2, HMG20B/BRAF35, AOF2/LSD1, RCOR1/CoREST and PHF21A/BHC80. The BHC complex may also contain ZMYM2, ZNF217, ZMYM3, GSE1 and GTF2I. Associates with the 9-1-1 complex; interacts with HUS1. Found in a complex with DNMT3A and HDAC7. Interacts with BCOR, BRMS1L, DAXX, DNMT1, EP300, HCFC1, NFE4, PCAF, PHB2, MIER1, KDM4A, MINT, NRIP1, PRDM6, RERE, SETDB1, SUV39H1, TGIF, TGIF2, UHRF1, UHRF2 and ZNF541. Interacts with the non-histone region of H2AFY. Interacts with HDAC9. Component of a mSin3A corepressor complex that contains SIN3A, SAP130, SUDS3/SAP45, ARID4B/SAP180, HDAC1 and HDAC2. Interacts with BANP, CBFA2T3 and KDM5B. Interacts with SAP30L. Interacts with E4F1. Interacts with KFL1 (By similarity). Interacts with SV40 large T antigen.,tissue specificity:Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain.,

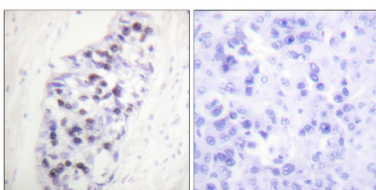
Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA; Protein_Acetylation

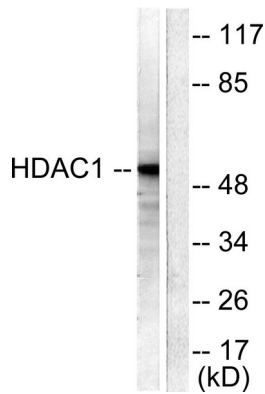
Image Data



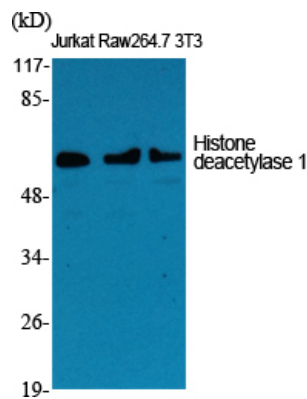
Immunofluorescence analysis of NIH/3T3 cells, using HDAC1 Antibody. The picture on the right is blocked with the synthesized peptide.



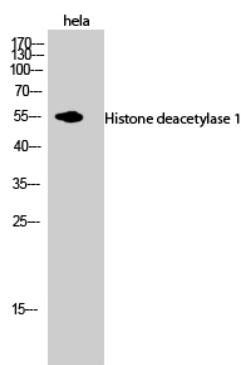
Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using HDAC1 Antibody. The picture on the right is blocked with the synthesized peptide.



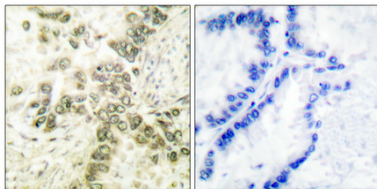
Western blot analysis of lysates from NIH/3T3 cells, using HDAC1 Antibody. The lane on the right is blocked with the synthesized peptide.



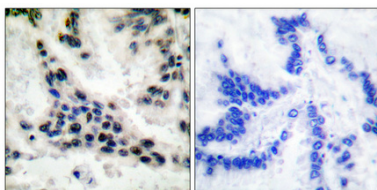
Western Blot analysis of various cells using Histone deacetylase 1 Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of hela cells using Histone deacetylase 1 Polyclonal Antibody diluted at 1: 1000



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4°,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4°,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.