

Histone deacetylase 1 Polyclonal Antibody

Catalog No: YT2145

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: HDAC1

Fields: >>Cell cycle;>>Longevity regulating pathway - multiple species;>>Notch

signaling pathway;>>Neutrophil extracellular trap formation;>>Thyroid hormone

signaling pathway;>>Huntington disease;>>Amphetamine

addiction;>>Alcoholism;>>Human papillomavirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Viral

carcinogenesis;>>MicroRNAs in cancer;>>Chronic myeloid leukemia

Gene Name: HDAC1

Protein Name: Histone deacetylase 1

Q13547

O09106

Human Gene Id: 3065

Human Swiss Prot

No:

Mouse Gene Id: 433759

Mouse Swiss Prot

No:

Rat Gene Id: 297893

Rat Swiss Prot No: Q4QQW4

Immunogen: The antiserum was produced against synthesized peptide derived from human

HDAC1. AA range:433-482

Specificity: Histone deacetylase 1 Polyclonal Antibody detects endogenous levels of Histone

deacetylase 1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/4



Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 55kD

Cell Pathway: Cell_Cycle_G1S;Cell_Cycle_G2M_DNA; Protein_Acetylation

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],

Function: 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

Subcellular Location:

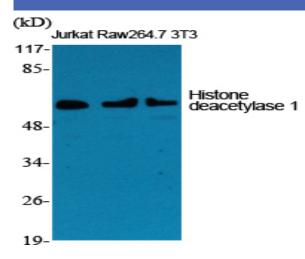
Nucleus.

Expression: Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in

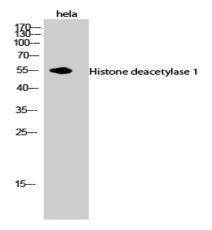
kidney and brain.



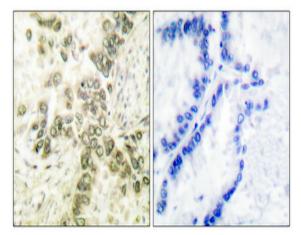
Products Images



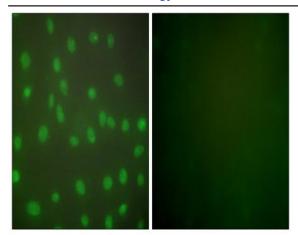
Western Blot analysis of various cells using Histone deacetylase 1 Polyclonal Antibody diluted at 1:1000



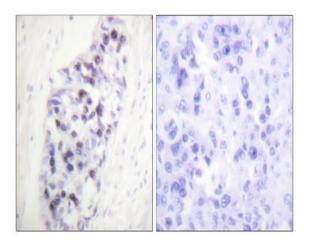
Western Blot analysis of hela cells using Histone deacetylase 1 Polyclonal Antibody diluted at 1:1000



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. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



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.