

HDAC1 (phospho Ser421) Polyclonal Antibody

Catalog No: YP0337

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 around the phosphorylation site of Ser421. AA range:387-436

Specificity: Phospho-HDAC1 (S421) Polyclonal Antibody detects endogenous levels of

HDAC1 protein only when phosphorylated at S421.

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

1/3



Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

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: 62kD

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

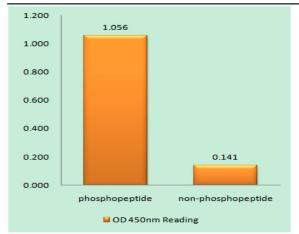
Subcellular Location:

Nucleus.

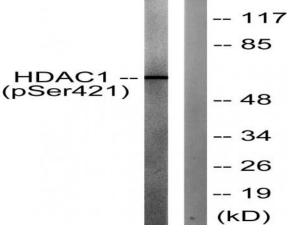
Expression: Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in

kidney and brain.

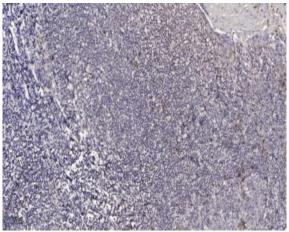
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HDAC1 (Phospho-Ser421) Antibody



Western blot analysis of lysates from Jurkat cells treated with EGF 200ng/ml 30', using HDAC1 (Phospho-Ser421) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).