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Mouse Monoclonal Antibody HDAC1 conjugated to Sepharose Beads

CatalogNo: ANT8239-S

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

HDAC1 (ANTO090R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IHC, IF, IP, ELISA

MW Isotype

• 55kD (Calculated) • IgG,Kappa

62kD (Observed)

## **Recommended Dilution Ratios**

#### IP

### **Basic Information**

**Clonality** Monoclonal

Clone Number ANT0090R

## Immunogen Information

**Specificity** Endogenous

Gene name HDAC1

**Protein Name** Histone deacetylase 1

| Organism | Gene ID         | UniProt ID      |
|----------|-----------------|-----------------|
| Human    | <u>3065</u> ;   | <u>Q13547</u> ; |
| Mouse    | <u>433759</u> ; | <u>009106</u> ; |
| Rat      | <u>297893</u> ; | <u>Q4QQW4</u> ; |

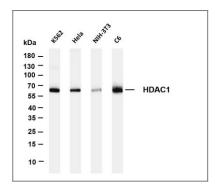
Cellular Nucleus

Localization

**Tissue specificity** Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain.

#### **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., ANTM: 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.,



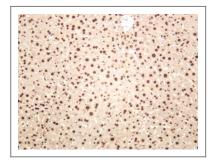
# **Validation**

### **Data**

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-HDAC1 (ANT0090R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: Hela Lane 3: NIH-3T3 Lane 4: C6 Predicted band size: 55kDa Observed band size: 62kDa



Human tonsil was stained with anti-HDAC1 (ANT0090R) rabbit antibody



Mouse liver was stained with anti-HDAC1 (ANT0090R) rabbit antibody



Rat liver was stained with anti-HDAC1 (ANT0090R) rabbit antibody

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