

# HDAC1 (Phospho Ser421) Rabbit pAb

CatalogNo: YP0337

Orthogonal Validated 

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB, IHC, IF, ELISA

### MW

- 62kD (Observed)

### Isotype

- IgG

## Recommended Dilution Ratios

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

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

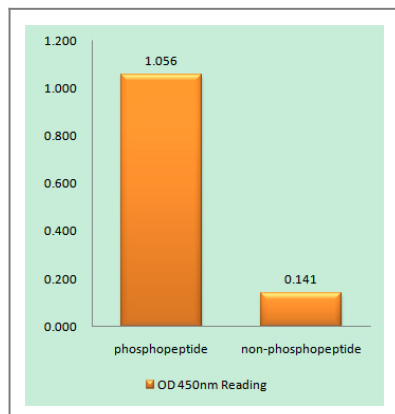
**Immunogen** The antiserum was produced against synthesized peptide derived from human HDAC1 around the phosphorylation site of Ser421. AA range: 387-436

**Specificity** Phospho-HDAC1 (S421) Polyclonal Antibody detects endogenous levels of HDAC1 protein only when phosphorylated at S421. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):EFsDS

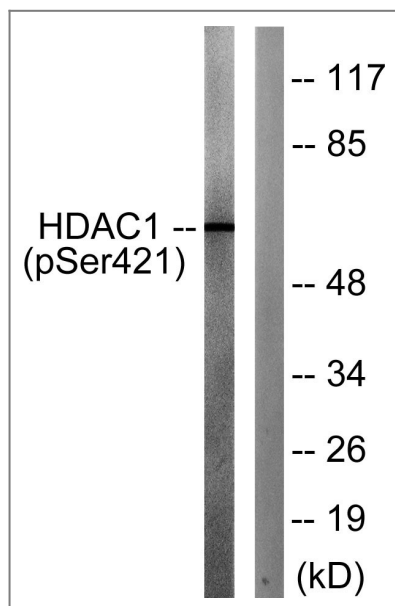
## Target Information

Gene name	HDAC1		
Protein Name	Histone deacetylase 1		
	Organism	Gene ID	UniProt ID
	Human	<a href="#">3065</a> ;	<a href="#">Q13547</a> ;
	Mouse	<a href="#">433759</a> ;	<a href="#">O09106</a> ;
	Rat	<a href="#">297893</a> ;	<a href="#">Q4QQW4</a> ;
Cellular Localization	Nucleus .		
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.,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.,		

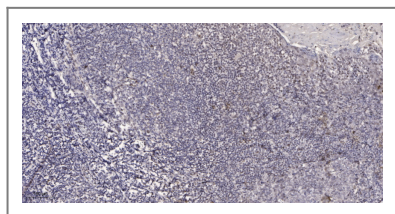
## Validation Data



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).

## Contact information

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Please scan the QR code to access additional product information:  
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