

# Immunotag™ HDAC1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT2112
Product Description	Immunotag™ HDAC1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	HDAC1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from HDAC1, at AA range: 360-440
Specificity	HDAC1 Polyclonal Antibody detects endogenous levels of HDAC1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	HDAC1
Accession No.	Q13547 O09106 Q4QQW4
Alternate Names	HDAC1; RPD3L1; Histone deacetylase 1; HD1

## Antibody Specification

Description	histone deacetylase 1(HDAC1) Homo sapiens 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],
Cell Pathway/ Category	Cell_Cycle_G1S,Cell_Cycle_G2M_DNA, Protein_Acetylation
Protein Expression	Epithelium,Fetal brain,Fetal lung,Liver,Lung,T-cell,
Subcellular Localization	histone deacetylase complex,chromatin,nuclear chromatin,nucleus,nucleoplasm,cytoplasm,cytosol,Sin3 complex,NuRD complex,neuron projection,protein complex,perinuclear region of cytoplasm,
Protein 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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.