

## HDAC1 (PT0390R) PT® Rabbit mAb

<b>Catalog No :</b>	YM8239
<b>Reactivity :</b>	Human; Mouse; Rat;
<b>Applications :</b>	WB;IHC;IF;IP;ELISA
<b>Target :</b>	HDAC1
<b>Fields :</b>	>>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
<b>Gene Name :</b>	HDAC1
<b>Protein Name :</b>	Histone deacetylase 1
<b>Human Gene Id :</b>	3065
<b>Human Swiss Prot No :</b>	Q13547
<b>Mouse Gene Id :</b>	433759
<b>Mouse Swiss Prot No :</b>	O09106
<b>Rat Gene Id :</b>	297893
<b>Rat Swiss Prot No :</b>	Q4QQW4
<b>Specificity :</b>	endogenous
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Monoclonal, rabbit, IgG, Kappa
<b>Dilution :</b>	IHC 1:4000-1:10000,WB 1:1000-1:5000,IF 1:200-1:1000,ELISA

1:5000-1:20000,IP 1:50-1:200,

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**Purification :** Protein A

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

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**Molecularweight :** 55kD

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**Observed Band :** 62kD

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**Cell Pathway :** Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA; Protein\_Acetylation

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**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],

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**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

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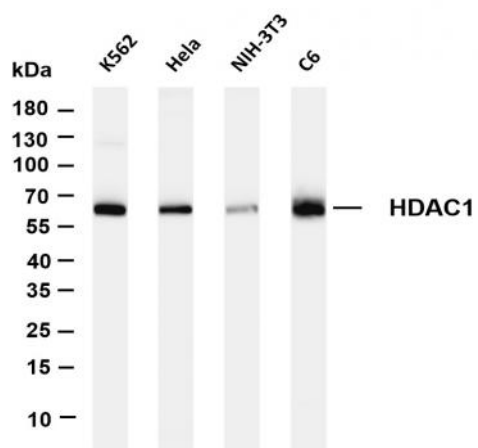
**Subcellular Location :** Nucleus

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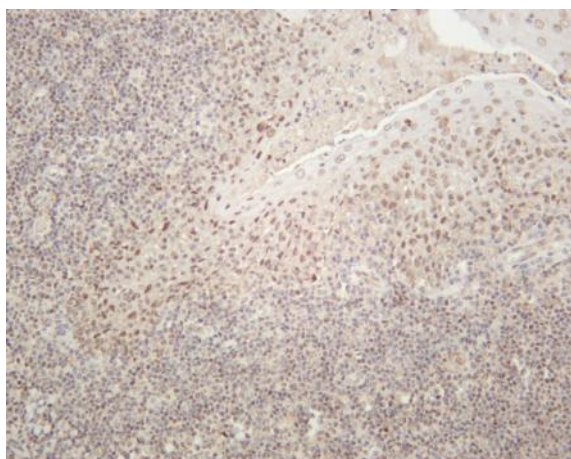
**Expression :** Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain.

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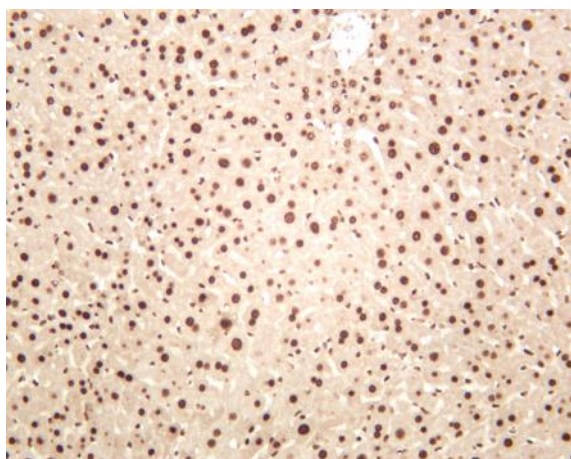
## Products Images



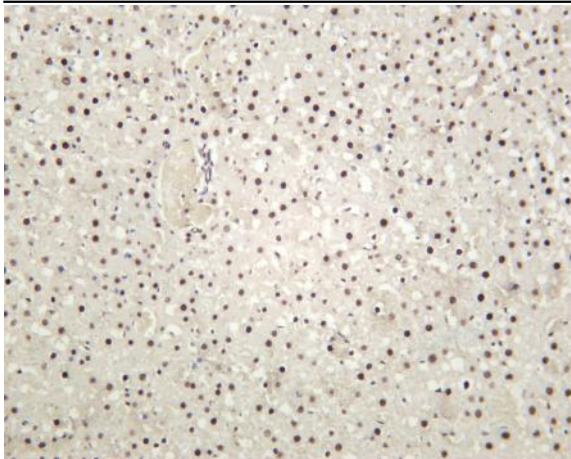
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-HDAC1 (PT0390R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: HeLa Lane 3: NIH-3T3 Lane 4: C6 Predicted band size: 55kDa Observed band size: 62kDa



Human tonsil was stained with anti-HDAC1 (PT0390R) rabbit antibody



Mouse liver was stained with anti-HDAC1 (PT0390R) rabbit antibody



Rat liver was stained with anti-HDAC1 (PT0390R) rabbit antibody