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# HDAC9 Antibody (C-term)

**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP1109b**

## Specification

### HDAC9 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | Q9UKV0 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **503-533** |

### HDAC9 Antibody (C-term) - Additional Information

**Gene ID** 9734

**Other Names**
Histone deacetylase 9, HD9, Histone deacetylase 7B, HD7, HD7b, Histone deacetylase-related protein, MEF2-interacting transcription repressor MITR, HDAC9, HDAC7, HDAC7B, HDRP, KIAA0744, MITR

**Target/Specificity**
This HDAC9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 503-533 amino acids from the C-terminal region of human HDAC9.

**Dilution**
WB~~1:1000
IHC-P~~1:50~100

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
HDAC9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### HDAC9 Antibody (C-term) - Protein Information

**Name** HDAC9

**Synonyms** HDAC7, HDAC7B, HDRP, KIAA0744, MITR

**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. Represses MEF2-dependent transcription.

**Cellular Location**
Nucleus.

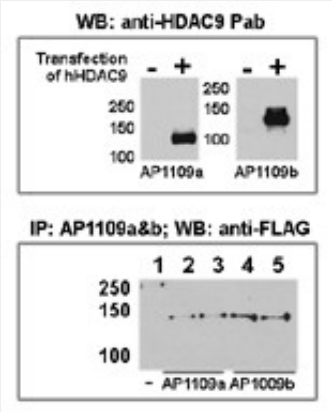
**Tissue Location**
Broadly expressed, with highest levels in brain, heart, muscle and testis. Isoform 3 is present in human bladder carcinoma cells (at protein level).

## HDAC9 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## HDAC9 Antibody (C-term) - Images




Both anti-HDAC9 N-term (AP1109a) and C-term (AP1109b) Pab were tested by WB and IP-WB using HeLa and HeLa-HDAC9 transfected cells. Top figure shows both Pab specifically detect HDAC9 in HeLa-HDAC9 transfected cell but not HeLa alone. Bottom figure shows that both Pab can immunoprecipitate (IP) HDAC9 from HeLa-HDAC9 tranfected cells. (Data kindly provided by Dr. Zhigang Yuan, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL).

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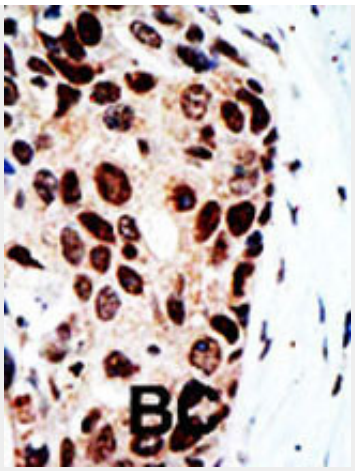


Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

**HDAC9 Antibody (C-term) - Background**

Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene has sequence homology to members of the histone deacetylase family. This gene is orthologous to the Xenopus and mouse MITR genes. The MITR protein lacks the histone deacetylase catalytic domain. It represses MEF2 activity through recruitment of multicomponent corepressor complexes that include CtBP and HDACs. This encoded protein may play a role in hematopoiesis. Multiple alternatively spliced transcripts have been described for this gene but the full-length nature of some of them has not been determined.

**HDAC9 Antibody (C-term) - References**

Petrie, K., et al., J. Biol. Chem. 278(18):16059-16072 (2003). David, D., et al., Genomics 81(5):489-503 (2003). Mahlknecht, U., et al., Biochem. Biophys. Res. Commun. 293(1):182-191 (2002). Zhou, X., et al., Proc. Natl. Acad. Sci. U.S.A. 98(19):10572-10577 (2001). Zhang, C.L., et al., J. Biol. Chem. 276(1):35-39 (2001).

**HDAC9 Antibody (C-term) - Citations**

- Specific control of pancreatic endocrine Î²- and Î´-cell mass by class IIa histone deacetylases HDAC4, HDAC5, and HDAC9.