

HDAC8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1108a

Specification

HDAC8 Antibody (N-term) - Product Information

WB, IHC-P,E Application **Primary Accession** O9BY41 Reactivity Human **Rabbit** Host Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 41758 Antigen Region 1-30

HDAC8 Antibody (N-term) - Additional Information

Gene ID 55869

Other Names

Histone deacetylase 8, HD8, HDAC8, HDACL1

Target/Specificity

This HDAC8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HDAC8.

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

HDAC8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC8 Antibody (N-term) - Protein Information

Name HDAC8 {ECO:0000303|PubMed:10926844, ECO:0000312|HGNC:HGNC:13315}

Function Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed: 10748112,



PubMed: 10922473, PubMed: 10926844, PubMed: 14701748, PubMed: 28497810). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (PubMed: 10748112, PubMed: 10922473, PubMed: 10926844, PubMed: 14701748). Histone deacetylases act via the formation of large multiprotein complexes (PubMed: 10748112, PubMed: 10922473, PubMed: 10926844, PubMed: 14701748). Also involved in the deacetylation of cohesin complex protein SMC3 regulating release of cohesin complexes from chromatin (PubMed: 22885700). May play a role in smooth muscle cell contractility (PubMed: 15772115). In addition to protein deacetylase activity, also has protein-lysine deacylase activity: acts as a protein decrotonylase by mediating decrotonylation ((2E)-butenoyl) of histones (PubMed: 28497810).

Cellular Location

Nucleus. Chromosome Cytoplasm Note=Excluded from the nucleoli (PubMed:10748112). Found in the cytoplasm of cells showing smooth muscle differentiation (PubMed:15772115, PubMed:16538051).

Tissue Location

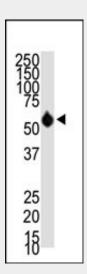
Weakly expressed in most tissues. Expressed at higher level in heart, brain, kidney and pancreas and also in liver, lung, placenta, prostate and kidney.

HDAC8 Antibody (N-term) - Protocols

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

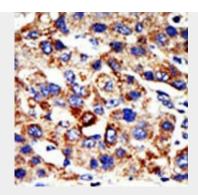
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HDAC8 Antibody (N-term) - Images



Western blot analysis of anti-HDAC8 Pab (Cat. #AP1108a) in mouse 3T3 cell lysate. HDAC8 (Arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.





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

HDAC8 Antibody (N-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 belongs to class I of the histone deacetylase/acuc/apha family. It has histone deacetylase activity and represses transcription when tethered to a promoter.

HDAC8 Antibody (N-term) - References

McDonell, N., et al., Genomics 64(3):221-229 (2000). Hu, E., et al., J. Biol. Chem. 275(20):15254-15264 (2000). Van den Wyngaert, I., et al., FEBS Lett. 478 (1-2), 77-83 (2000). Buggy, J.J., et al., Biochem. J. 350 Pt 1, 199-205 (2000).