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Anti-HDAC8 Antibody
Catalog # ABO10905

Specification

Anti-HDAC8 Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q9BY41
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Histone deacetylase 8(HDAC8) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HDAC8 Antibody - Additional Information

Gene ID 55869

Other Names
Histone deacetylase 8, HD8, 3.5.1.98, HDAC8, HDACL1

Calculated MW
41758 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Nucleus. Cytoplasm. Excluded from the nucleoli. Found in the cytoplasm of cells showing smooth muscle differentiation.

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

Protein Name
Histone deacetylase 8(HD8)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human HDAC8(18-33aa YIYSPEYVSMCDSLAK), different from the related mouse and rat sequences by two amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-HDAC8 Antibody - 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).

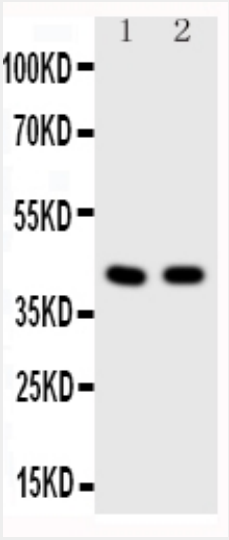
Tissue Location
Weakly expressed in most tissues. Expressed at higher level in heart, brain, kidney and pancreas and also in liver, lung, placenta, prostate and kidney.

Anti-HDAC8 Antibody - Protocols

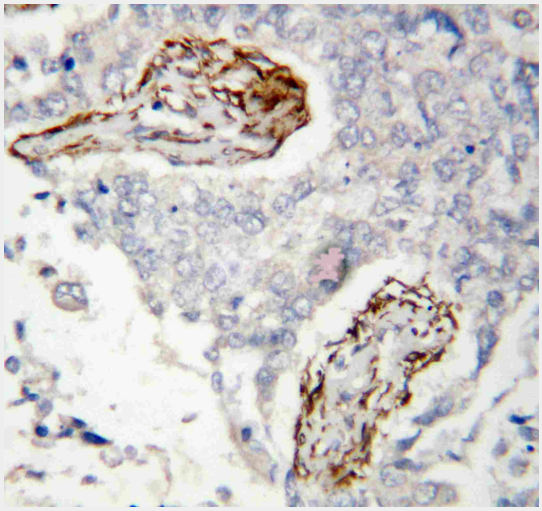
Provided below are standard protocols that you may find useful for product applications.

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

Anti-HDAC8 Antibody - Images



Anti-HDAC8 antibody, ABO10905, Western blottingAll lanes: Anti HDAC8 (ABO10905) at 0.5ug/mlLane 1: Rat Cardiac Muscle: Tissue Lysate at 50ugLane 2: A549 Whole Cell Lysate at 40ugPredicted bind size: 42KDObserved bind size: 42KD



Anti-HDAC8 antibody, ABO10905, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-HDAC8 Antibody - Background

HDAC8, Histone deacetylase 8, is an enzyme that in humans is encoded by the HDAC8 gene, and is biologically involved in skull morphogenesis and metabolic control of the ERR-alpha/PGC1-alpha

transcriptional complex. Sequence analysis predicted that the 377-amino acid HDAC8 protein contains the 9 conserved HDAC blocks that are presumably important for catalytic function. HDAC8 shares 54% sequence similarity with HDAC1 and HDAC2 and 39% similarity with HDAC3, making it a class I HDAC. 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.