

Anti-HDAC8 Antibody

Catalog # ABO10905

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.

Additional Information

Gene ID	55869
Other Names	Histone deacetylase 8, HD8, 3.5.1.98, HDAC8, HDACL1
Calculated MW	41758
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. .
Source	Eukaryota
Protein Name	Histone deacetylase 8(HD8)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
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.
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Protein Information

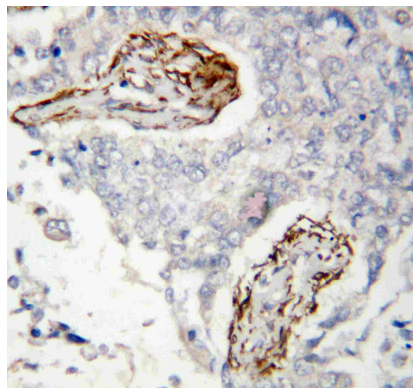
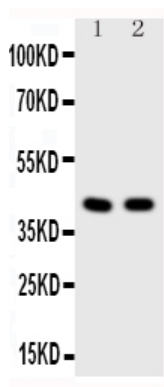
Name	HDAC8 {ECO:0000303 PubMed:10926844, ECO:0000312 HGNC:HGNC:13315}
Function	Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed: 10748112 , PubMed: 10922473 , PubMed: 10926844 , PubMed: 14701748 , PubMed: 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.

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.