

HDAC2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10446

Specification

HDAC2 Antibody - Product Information

WB, ICC Application **Primary Accession** 092769 Other Accession EAW48255

Human, Mouse, Rat, Hamster, Chicken, Reactivity

Host Rabbit **Polyclonal** Clonality Isotype Rabbit IgG Calculated MW 55364

HDAC2 Antibody - Additional Information

Gene ID 3066

Application & Usage Western blotting (0.5-4 µg/ml) and immunocytochemistry (10-20 µg/ml).

> However, the optimal conditions should be determined individually. The antibody detects 55 kDa Histone Deacetylase 2 in samples from human, mouse, rat, chicken,

hamster, and canine origins.

Other Names

HDAC-2, Histone Deacetylase 2, RPD3, YAF1

Target/Specificity

HDAC2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 μg (0.2 mg/ml) affinity purified rabbit anti-HDAC2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



Precautions

HDAC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC2 Antibody - Protein Information

Name HDAC2 {ECO:0000303|PubMed:10545197, ECO:0000312|HGNC:HGNC:4853}

Function

the core histones (H2A, H2B, H3 and H4) (PubMed:28497810). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (By similarity). Histone deacetylases act via the formation of large multiprotein complexes (By similarity). Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR (PubMed:12724404). Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development (By similarity). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:16428440, PubMed:28977666). Component of the SIN3B complex that represses transcription

Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of

and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (PubMed:37137925). Also deacetylates non-histone targets: deacetylates TSHZ3, thereby regulating its transcriptional repressor activity (PubMed:19343227). May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation (By similarity). Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A (PubMed:21965678). In addition to protein deacetylase activity, also acts as a protein-lysine deacylase by recognizing other acyl

de-2- hydroxyisobutyrylation, respectively (PubMed:28497810, PubMed:29192674).

(2-hydroxyisobutyryl) acyl groups from lysine residues, leading to protein decrotonylation and

groups: catalyzes removal of (2E)-butenoyl (crotonyl) and 2- hydroxyisobutanoyl

Cellular Location Nucleus. Cytoplasm

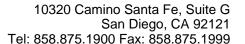
Tissue Location

Widely expressed; lower levels in brain and lung.

HDAC2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot





• <u>Immunohistochemistry</u>

- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

HDAC2 Antibody - Images

HDAC2 Antibody - Background

HDAC2 is a class I mammalian histone deacetylase containing 488 amino acid residues with an apparent size of ~55 kDa by denaturing SDS-PAGE. HDAC2 has been shown to interact directly with transcription repressor complexes and the nuclear receptor corepressor N-CoR.