

HDAC2 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10446**Specification**

HDAC2 Antibody - Product Information

Application	WB, ICC
Primary Accession	O92769
Other Accession	EAW48255
Reactivity	Human, Mouse, Rat, Hamster, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
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.
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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

Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of 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 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 groups: catalyzes removal of (2E)-butenoyl (crotonyl) and 2- hydroxyisobutanoyl (2-hydroxyisobutyryl) acyl groups from lysine residues, leading to protein decrotonylation and de-2- hydroxyisobutyrylation, respectively (PubMed:28497810, PubMed:29192674).

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](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.