

HDAC2 Antibody (aa360-409)

Rabbit Polyclonal Antibody Catalog # ALS14676

Specification

HDAC2 Antibody (aa360-409) - Product Information

Application WB, IHC Primary Accession Q92769

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 55kDa KDa

HDAC2 Antibody (aa360-409) - Additional Information

Gene ID 3066

Other Names

Histone deacetylase 2, HD2, 3.5.1.98, HDAC2

Target/Specificity

HDAC2 (Ab-394) Antibody detects endogenous levels of total HDAC2 protein.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

HDAC2 Antibody (aa360-409) is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC2 Antibody (aa360-409) - 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:<a href="http://www.uniprot.org/citations/28977666"



target=" blank">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.

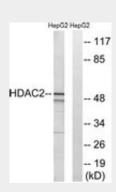
Volume 50 ul

HDAC2 Antibody (aa360-409) - 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

HDAC2 Antibody (aa360-409) - Images



Western blot of extracts from HepG2 cells, using HDAC2 (Ab-394) Antibody.





Anti-HDAC2 antibody IHC of human skin.

HDAC2 Antibody (aa360-409) - Background

Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. 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. May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation. Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A.

HDAC2 Antibody (aa360-409) - References

Yang W.-M., et al. Proc. Natl. Acad. Sci. U.S.A. 93:12845-12850(1996). Ota T., et al. Nat. Genet. 36:40-45(2004). Mungall A.J., et al. Nature 425:805-811(2003). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Schmidt D.R., et al. Biochemistry 38:14711-14717(1999).