

Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal Antibody

Catalog # ABO13579

Specification

Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description** Anti-HDAC2/Histone Deacetylase 2 Rabbit Monocl

WB, IHC, IF, ICC, IP, FC <u>092769</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 3066

Other Names Histone deacetylase 2, HD2, 3.5.1.98, Protein deacylase HDAC2, 3.5.1.-, HDAC2 {ECO:0000303|PubMed:10545197, ECO:0000312|HGNC:HGNC:4853}

Calculated MW 55364 MW KDa

Application Details WB 1:1000-1:2000
IHC 1:50-1:100
ICC/IF 1:50-1:100
IP 1:30
FC 1:50

Subcellular Localization Nucleus. Cytoplasm.

Tissue Specificity Widely expressed; lower levels in brain and lung.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human HDAC2

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated



freeze-thaw cycles.

Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal 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), lactoyl (lactyl) and 2-hydroxyisobutanoyl (2-hydroxyisobutyryl) acyl groups from lysine residues, leading to protein decrotonylation, delactylation and de-2-hydroxyisobutyrylation, respectively (PubMed:28497810, PubMed:29192674, PubMed:35044827).

Cellular Location Nucleus. Cytoplasm

Tissue Location Widely expressed; lower levels in brain and lung.

Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal Antibody - Protocols

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

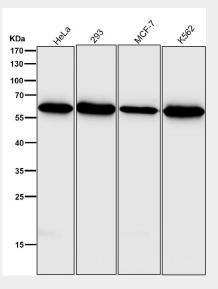
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



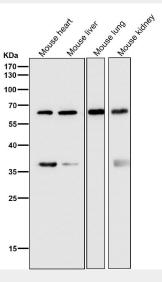
Flow Cytomety

<u>Cell Culture</u>

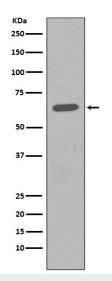
Anti-HDAC2/Histone Deacetylase 2 Rabbit Monoclonal Antibody - Images



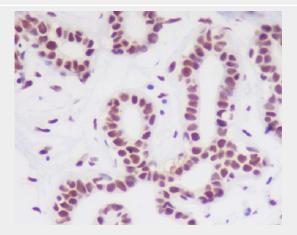
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Western blot analysis of HDAC2 expression in K562 cell lysate.



Immunohistochemical analysis of paraffin-embedded human breast, using HDAC2 Antibody.