

**Anti-Histone Deacetylase 2 Antibody**  
Rabbit polyclonal antibody to Histone Deacetylase 2  
Catalog # AP61512

### Specification

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#### Anti-Histone Deacetylase 2 Antibody - Product Information

Application	WB
Primary Accession	<a href="#">O92769</a>
Other Accession	<a href="#">P70288</a>
Reactivity	Human, Mouse, Rat, Monkey, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55364

#### Anti-Histone Deacetylase 2 Antibody - Additional Information

**Gene ID** 3066

#### Other Names

Histone deacetylase 2; HD2

#### Target/Specificity

Recognizes endogenous levels of Histone Deacetylase 2 protein.

#### Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

#### Anti-Histone Deacetylase 2 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:<a href="http://www.uniprot.org/citations/28497810" target="\_blank">28497810</a>). 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:<a href="http://www.uniprot.org/citations/12724404" target="\_blank">12724404</a>). 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](http://www.uniprot.org/citations/16428440), PubMed: [28977666](http://www.uniprot.org/citations/28977666) target="\_blank">28977666</a>). 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](http://www.uniprot.org/citations/37137925) target="\_blank">37137925</a>). Also deacetylates non-histone targets: deacetylates TSHZ3, thereby regulating its transcriptional repressor activity (PubMed: [19343227](http://www.uniprot.org/citations/19343227) target="\_blank">19343227</a>). 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](http://www.uniprot.org/citations/21965678) target="\_blank">21965678</a>). 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 deacetylation, delactylation and de-2-hydroxyisobutyrylation, respectively (PubMed: [28497810](http://www.uniprot.org/citations/28497810) target="\_blank">28497810</a>, PubMed: [29192674](http://www.uniprot.org/citations/29192674) target="\_blank">29192674</a>, PubMed: [35044827](http://www.uniprot.org/citations/35044827) target="\_blank">35044827</a>).

**Cellular Location**

Nucleus. Cytoplasm

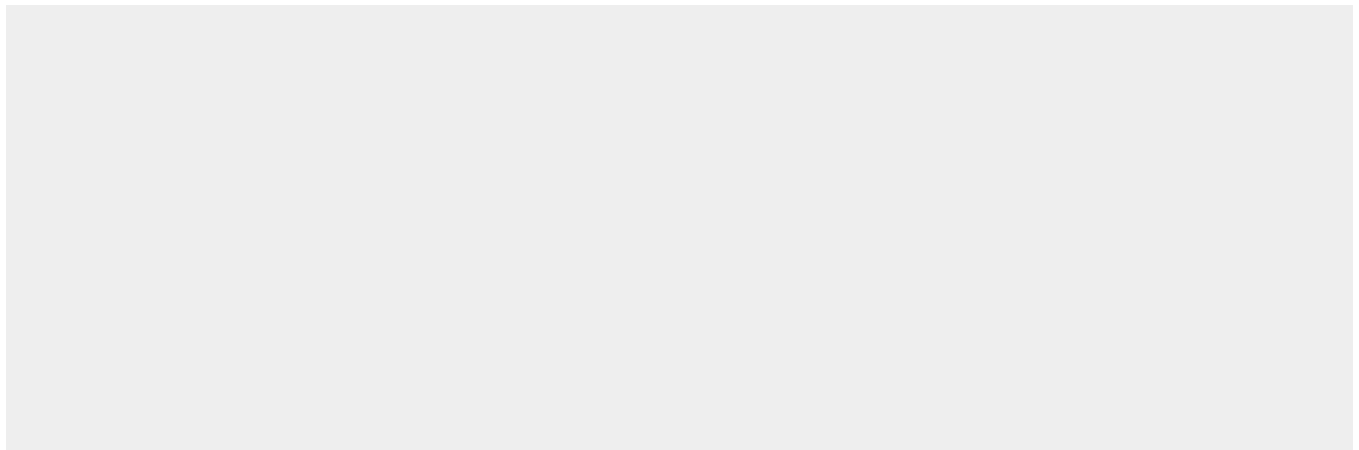
**Tissue Location**

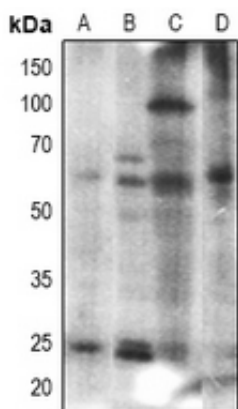
Widely expressed; lower levels in brain and lung.

**Anti-Histone Deacetylase 2 Antibody - Protocols**

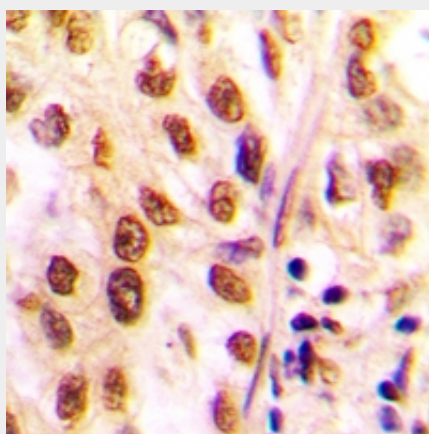
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Histone Deacetylase 2 Antibody - Images**



Western blot analysis of Histone Deacetylase 2 expression in HEK293T (A), Jurkat (B), mouse kidney (C), PC12 (D) whole cell lysates.



Immunohistochemical analysis of Histone Deacetylase 2 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-Histone Deacetylase 2 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Histone Deacetylase 2. The exact sequence is proprietary.