

HDAC2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1102b**Specification**

HDAC2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q92769](#)**HDAC2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 3066**Other Names**

Histone deacetylase 2, HD2, HDAC2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1102b](/product/products/AP1102b) was selected from the C-term region of human HDAC2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HDAC2 Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16428440))

target="_blank">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 (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

HDAC2 Antibody (C-term) Blocking Peptide - Images

HDAC2 Antibody (C-term) Blocking Peptide - Background

Histone deacetylase 2 (HDAC2), or transcriptional regulator homolog RPD3 L1, is highly homologous to the yeast transcription factor RPD3 (reduced potassium dependency 3) gene. As in yeast, human HDA2 is likely to be involved in regulating chromatin structure during transcription. It has been implicated to associate with YY1, a mammalian zinc-finger transcription factor, which negatively regulates transcription by tethering RPD3 to DNA as a cofactor. This process is highly conserved from yeast to human.

HDAC2 Antibody (C-term) Blocking Peptide - References

Choi, Y.B., et al., J. Biol. Chem. 279(49):50930-50941 (2004).Zhu, P., et al., Cancer Cell 5(5):455-463 (2004).Longworth, M.S., et al., J. Virol. 78(7):3533-3541 (2004).Lu, Y., et al., J. Biol. Chem. 278(48):47792-47802 (2003).Verdin, E., et al., Trends Genet. 19(5):286-293 (2003).