

## **HDAC-2 Blocking Peptide**

Catalog # PBV10256b

### **Specification**

## **HDAC-2 Blocking Peptide - Product Information**

Primary Accession Q92769
Other Accession EAW48255
Gene ID 3066
Calculated MW 55364

### **HDAC-2 Blocking Peptide - Additional Information**

**Gene ID 3066** 

Application & Usage The peptide is used for blocking the

antibody activity of active HDAC-2. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume

of antibody for 30 minutes at 37°C

**Other Names** 

Histone deacetylase 2, HD2, 3.5.1.98, HDAC2

Target/Specificity

HDAC-2

#### **Formulation**

 $50~\mu g$  (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

**Reconstitution & Storage** 

-20 °C

# **Background Descriptions**

### **Precautions**

HDAC-2 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

### **HDAC-2 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:<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:<a href="http://www.uniprot.org/citations/16428440" target=" blank">16428440</a>, PubMed:<a href="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: <a href="http://www.uniprot.org/citations/37137925" target=" blank">37137925</a>). Also deacetylates non-histone targets: deacetylates TSHZ3, thereby regulating its transcriptional repressor activity (PubMed:<a href="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: <a href="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) and 2- hydroxyisobutanoyl (2-hydroxyisobutyryl) acyl groups from lysine residues, leading to protein decrotonylation and de-2- hydroxyisobutyrylation, respectively (PubMed:<a href="http://www.uniprot.org/citations/28497810" target="\_blank">28497810</a>, PubMed:<a href="http://www.uniprot.org/citations/29192674" target="blank">29192674</a>).

**Cellular Location** Nucleus. Cytoplasm

**Tissue Location** 

Widely expressed; lower levels in brain and lung.

# **HDAC-2 Blocking Peptide - 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

**HDAC-2 Blocking Peptide - Images**