

**HDAC-5 Blocking Peptide**  
**Catalog # PBV10259b****Specification**

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**HDAC-5 Blocking Peptide - Product Information**

Primary Accession	<a href="#">O9UQL6</a>
Gene ID	<b>10014</b>
Calculated MW	<b>121978</b>

**HDAC-5 Blocking Peptide - Additional Information****Gene ID** 10014**Application & Usage**

The peptide is used for blocking the antibody activity of HDAC-5. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

**Other Names**

Histone deacetylase 5, HD5, 3.5.1.98, Antigen NY-CO-9, HDAC5, KIAA0600

**Target/Specificity**

HDAC-5

**Formulation**

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

HDAC-5 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

**HDAC-5 Blocking Peptide - Protein Information****Name** HDAC5**Synonyms** KIAA0600**Function**

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. Involved in muscle maturation by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer. Serves as a corepressor of RARA and causes its deacetylation (PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>).

#### **Cellular Location**

Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm. In muscle cells, it shuttles into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-259 and Ser-498 by AMPK, CaMK1 and SIK1

#### **Tissue Location**

Ubiquitous.

### **HDAC-5 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 Cytometry](#)
- [Cell Culture](#)

### **HDAC-5 Blocking Peptide - Images**