

**HDAC5 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10450****Specification**

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**HDAC5 Antibody - Product Information**

Application	WB, IHC, IP
Primary Accession	<a href="#">O9UQL6</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	121978

**HDAC5 Antibody - Additional Information****Gene ID** 10014**Application & Usage**

Western blotting (0.5-4 µg/ml), Immunoprecipitation (20 µg/ml), and Immunohistochemistry (20 µg/ml). However, the optimal conditions should be determined individually. The antibody detects ~124 kDa HDAC5 with human and mouse samples, and in a lesser extent with rat samples. It does not cross-react with other HDAC proteins including HDAC1, 2, 3, 4, 6, 7, 8, 9,10, and 11.

**Other Names**

HD5 , FLJ90614 , KIAA0600 , NY-CO-9

**Target/Specificity**

HDAC5

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) affinity purified rabbit anti-HDAC5 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

## Background Descriptions

### Precautions

HDAC5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## HDAC5 Antibody - 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.

## HDAC5 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](#)

## HDAC5 Antibody - Images

## HDAC5 Antibody - Background

Human HDAC5 is composed of 1122 amino acid residues. The deacetylase domain of HDAC5 is located at the C-terminal half of the molecule. The N-terminal non-deacetylase domain does not

show any significant homology with any published sequence. Both domains are required for HDAC5-mediated repression of gene transcription. HDAC5 interacts with a growing number of transcriptional factors including MEF2A as well as other HDAC proteins. The interacting complexes bind to specific regions of chromatin and regulate gene transcription in these regions.