

**Anti-HDAC5 Antibody**  
**Catalog # ABO11489****Specification**

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**Anti-HDAC5 Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">Q9UQL6</a> |
| Host              | Rabbit                 |
| Reactivity        | Human, Mouse, Rat      |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for Histone deacetylase 5(HDAC5) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-HDAC5 Antibody - Additional Information**

**Gene ID** 10014

**Other Names**

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

**Calculated MW**

121978 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Nucleus. Cytoplasm. 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 Specificity**

Ubiquitous.

**Protein Name**

Histone deacetylase 5

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human HDAC5(626-644aa YKKLFSDAQPLQLQVYQA), different from the related rat and mouse sequences by two amino

acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the histone deacetylase family. HD type 2 subfamily.

**Anti-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: [28167758](http://www.uniprot.org/citations/28167758)). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed: [28167758](http://www.uniprot.org/citations/28167758)).

**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.

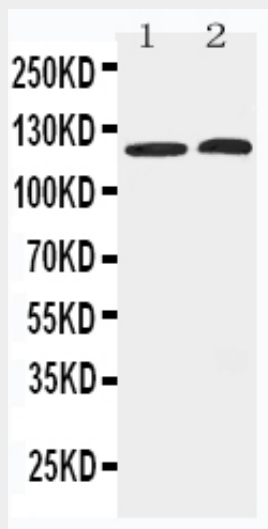
**Anti-HDAC5 Antibody - Protocols**

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](#)

#### Anti-HDAC5 Antibody - Images



Anti-HDAC5 antibody, ABO11489, Western blotting  
Lane 1: HELA Cell Lysate  
Lane 2: COLO320 Cell Lysate

#### Anti-HDAC5 Antibody - Background

Histone deacetylase 5, also called HDAC5 or KIAA0600, is an enzyme that in humans is encoded by the HDAC5 gene. The protein encoded by this gene belongs to the class II histone deacetylase/acuc/apha family. This gene is mapped to 17q21.31. Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. It coimmunoprecipitates only with HDAC3 family member and might form multicomplex proteins. It also interacts with myocyte enhancer factor-2(MEF2) proteins, resulting in repression of MEF2-dependent genes. This gene is thought to be associated with colon cancer.