

**Anti-Histone Deacetylase 5 Antibody**  
**Rabbit polyclonal antibody to Histone Deacetylase 5**  
**Catalog # AP59786****Specification**

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**Anti-Histone Deacetylase 5 Antibody - Product Information**

Application	WB, IH, IF
Primary Accession	<a href="#">O9UQL6</a>
Other Accession	<a href="#">O9Z2V6</a>
Reactivity	Human, Mouse, Rat, Pig, Bovine, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	121978

**Anti-Histone Deacetylase 5 Antibody - Additional Information****Gene ID** 10014**Other Names**

KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9

**Target/Specificity**

Recognizes endogenous levels of Histone Deacetylase 5 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-Histone Deacetylase 5 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

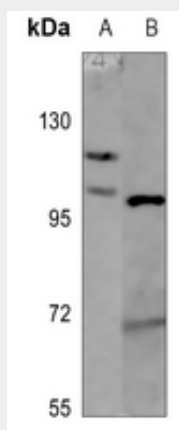
Ubiquitous.

### Anti-Histone Deacetylase 5 Antibody - Protocols

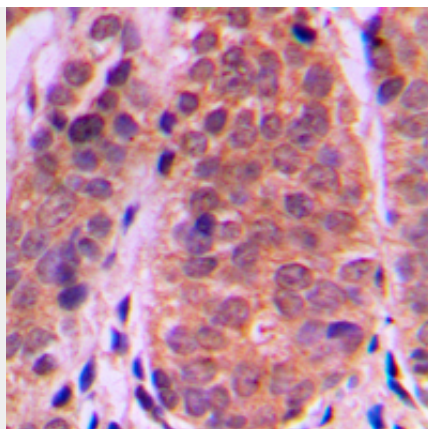
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

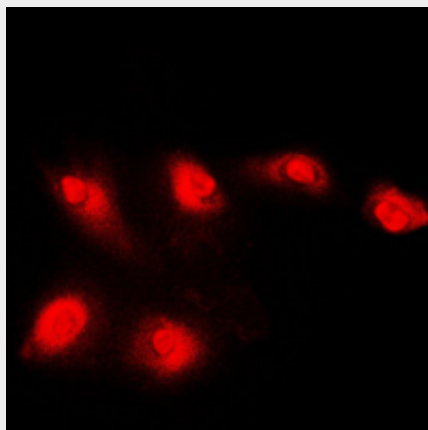
### Anti-Histone Deacetylase 5 Antibody - Images



Western blot analysis of Histone Deacetylase 5 expression in HEK293T (A), mouse liver (B) whole cell lysates.



Immunohistochemical analysis of Histone Deacetylase 5 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Histone Deacetylase 5 staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

#### **Anti-Histone Deacetylase 5 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Histone Deacetylase 5. The exact sequence is proprietary.