

**Anti-Histone Deacetylase 7 Antibody**  
**Rabbit polyclonal antibody to Histone Deacetylase 7**  
**Catalog # AP59842****Specification**

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**Anti-Histone Deacetylase 7 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q8WUI4</a>
Other Accession	<a href="#">Q8C2B3</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	102927

**Anti-Histone Deacetylase 7 Antibody - Additional Information****Gene ID** 51564**Other Names**

HDAC7A; Histone deacetylase 7; HD7; Histone deacetylase 7A; HD7a

**Target/Specificity**

Recognizes endogenous levels of Histone Deacetylase 7 protein.

**Dilution**

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

IHC~~1:100~500

**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 7 Antibody - Protein Information****Name** HDAC7**Synonyms** HDAC7A**Function**

Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (By similarity). 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). Involved in muscle maturation by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C (By similarity). During muscle differentiation, it shuttles

into the cytoplasm, allowing the expression of myocyte enhancer factors (By similarity). May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene (PubMed:<a href="http://www.uniprot.org/citations/12239305" target="\_blank">12239305</a>). Positively regulates the transcriptional repressor activity of FOXP3 (PubMed:<a href="http://www.uniprot.org/citations/17360565" target="\_blank">17360565</a>). Serves as a corepressor of RARA, causing its deacetylation and inhibition of RARE DNA element binding (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>). Also acetylates non-histone proteins, such as ALKBH5 (PubMed:<a href="http://www.uniprot.org/citations/37369679" target="\_blank">37369679</a>).

### Cellular Location

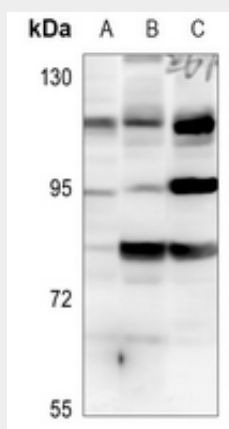
Nucleus. Cytoplasm Note=In the nucleus, it associates with distinct subnuclear dot-like structures (PubMed:11262386). Shuttles between the nucleus and the cytoplasm (PubMed:16980613). In muscle cells, it shuttles into the cytoplasm during myocyte differentiation (By similarity). The export to cytoplasm depends on the interaction with the 14-3-3 protein YWHAE and is due to its phosphorylation (PubMed:16980613) {ECO:0000250|UniProtKB:Q8C2B3, ECO:0000269|PubMed:11262386, ECO:0000269|PubMed:16980613}

### Anti-Histone Deacetylase 7 Antibody - Protocols

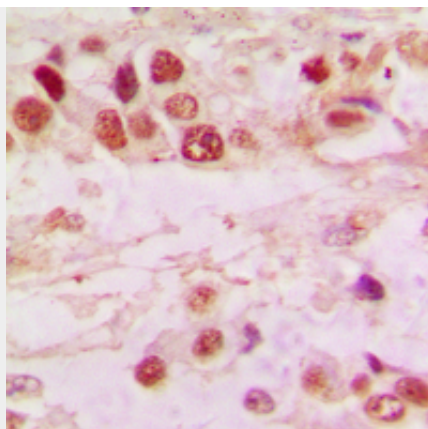
Provided below are standard protocols that you may find useful for product applications.

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

### Anti-Histone Deacetylase 7 Antibody - Images



Western blot analysis of Histone Deacetylase 7 expression in H1792 (A), mouse muscle (B), rat muscle (C) whole cell lysates.



Immunohistochemical analysis of Histone Deacetylase 7 staining in human lung 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.

#### **Anti-Histone Deacetylase 7 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Histone Deacetylase 7. The exact sequence is proprietary.