

# Anti-Histone Deacetylase 5/9 Antibody

Catalog # AP53852

#### **Product Information**

Application WB
Primary Accession Q9UQL6
Other Accession Q9UKV0

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW121978

#### **Additional Information**

**Gene ID** 10014

**Other Names** HDAC5; KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9; HDAC9;

HDAC7; HDAC7B; HDRP; KIAA0744; MITR; Histone deacetylase 9; HD9; Histone

deacetylase 7B; HD7; HD7b; Histone deacetylase-related protein;

MEF2-interacting transcription repressor MITR

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human Histone Deacetylase 5/9. The exact sequence is proprietary.

**Dilution** WB~~1/500 - 1/1000

**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

#### **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: <u>28167758</u>). In

association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed: 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

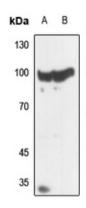
**Tissue Location** 

Ubiquitous.

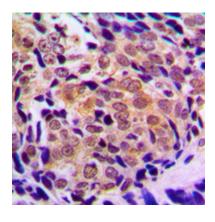
## **Background**

Rabbit polyclonal antibody to Histone Deacetylase 5/9

### **Images**



Western blot analysis of Histone Deacetylase 5/9 expression in mouse muscle (A), rat muscle (B) whole cell lysates.



Immunohistochemical analysis of Histone Deacetylase 5/9 staining in human prostate 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.

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