

# **HDAC5** Polyclonal Antibody

Catalog # AP70299

### **Product Information**

**Application** WB, IHC-P, IF **Primary Accession** Q9UQL6

**Reactivity** Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW121978

#### **Additional Information**

**Gene ID** 10014

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

**Dilution** WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name HDAC5

Synonyms KIAA0600

**Function** Responsible for the deacetylation of lysine residues on the N-terminal part

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

of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag

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

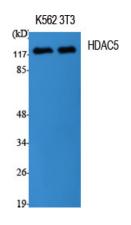
**Tissue Location** 

Ubiquitous.

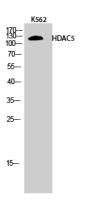
# **Background**

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.

## **Images**



Western Blot analysis of various cells using HDAC5 Polyclonal Antibody



Western Blot analysis of K562 cells using HDAC5 Polyclonal Antibody

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