

# HDAC7 Rabbit mAb

Catalog # AP77562

# **Product Information**

**Application** WB, IF, FC, ICC **Primary Accession** Q8WUI4

Reactivity Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human HDAC7

**Purification** Affinity Chromatography

Calculated MW 102927

# **Additional Information**

**Gene ID** 51564

Other Names HDAC7

**Dilution** WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

### **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

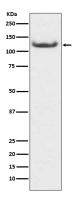
similarity). May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene (PubMed: 12239305). Positively regulates the transcriptional repressor activity of FOXP3 (PubMed: 17360565). Serves as a

corepressor of RARA, causing its deacetylation and inhibition of RARE DNA element binding (PubMed:<u>28167758</u>). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:<u>28167758</u>). Also acetylates non-histone proteins, such as ALKBH5 (PubMed:<u>37369679</u>).

#### **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}

# **Images**



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