

# Anti-Histone Deacetylase 7 (pS155) Antibody

Rabbit polyclonal antibody to Histone Deacetylase 7 (pS155) Catalog # AP60572

#### **Product Information**

Application WB, IF/IC
Primary Accession Q8WUI4
Other Accession Q8C2B3

**Reactivity** Human, Mouse, Rat, Zebrafish

HostRabbitClonalityPolyclonalCalculated MW102927

#### **Additional Information**

**Gene ID** 51564

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

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

N-term region of human Histone Deacetylase 7. The exact sequence is

proprietary.

**Dilution** WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IF/IC~~N/A

**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 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:<u>17360565</u>). 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>).

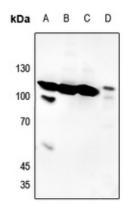
#### **Cellular Location**

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}

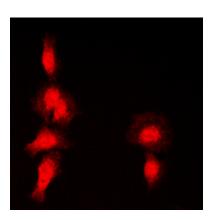
## **Background**

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

### **Images**



Western blot analysis of Histone Deacetylase 7 (pS155) expression in HEK293T (A), Hela (B), U2OS (C), rat lung (D) whole cell lysates.



Immunofluorescent analysis of Histone Deacetylase 7 (pS155) staining in HepG2 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 hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.