

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

Specification

Anti-Histone Deacetylase 7 (pS155) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IF/IC <u>O8WUI4</u> <u>O8C2B3</u> Human, Mouse, Rat, Zebrafish Rabbit Polyclonal 102927

Anti-Histone Deacetylase 7 (pS155) 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 (pS155) protein.

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

Anti-Histone Deacetylase 7 (pS155) 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: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:28167758). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:28167758). Also acetylates non-histone proteins, such as ALKBH5 (PubMed:37369679).

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 (pS155) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Histone Deacetylase 7 (pS155) Antibody - 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.

Anti-Histone Deacetylase 7 (pS155) Antibody - Background

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