

Anti-Histone Deacetylase 4 Antibody
Rabbit polyclonal antibody to Histone Deacetylase 4
Catalog # AP60306**Specification**

Anti-Histone Deacetylase 4 Antibody - Product Information

Application	WB
Primary Accession	P56524
Other Accession	Q6NZM9
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken, Bovine, SARS, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	119040

Anti-Histone Deacetylase 4 Antibody - Additional Information**Gene ID** 9759**Other Names**

KIAA0288; Histone deacetylase 4; HD4

Target/Specificity

Recognizes endogenous levels of Histone Deacetylase 4 protein.

Dilution

WB~~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

Anti-Histone Deacetylase 4 Antibody - Protein Information**Name** HDAC4 ([HGNC:14063](#))**Synonyms** KIAA0288**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 via its interaction with the myocyte enhancer factors such as MEF2A, MEF2C and MEF2D. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer.

Deacetylates HSPA1A and HSPA1B at 'Lys-77' leading to their preferential binding to co-chaperone STUB1 (PubMed:27708256).

Cellular Location

Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm. Upon muscle cells differentiation, it accumulates in the nuclei of myotubes, suggesting a positive role of nuclear HDAC4 in muscle differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-246, Ser-467 and Ser-632 by CaMK4 and SIK1. The nuclear localization probably depends on sumoylation Interaction with SIK3 leads to HDAC4 retention in the cytoplasm (By similarity). {ECO:0000250|UniProtKB:Q6NZM9}

Tissue Location

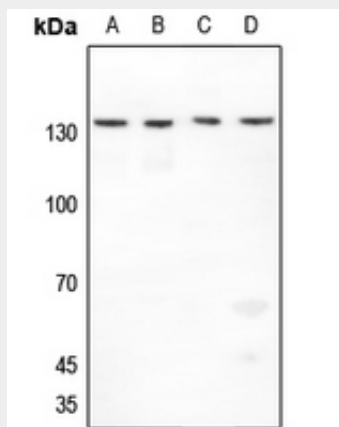
Ubiquitous.

Anti-Histone Deacetylase 4 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Histone Deacetylase 4 Antibody - Images



Western blot analysis of Histone Deacetylase 4 expression in Hela (A), H446 (B), mouse testis (C), rat lung (D) whole cell lysates.

Anti-Histone Deacetylase 4 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Histone Deacetylase 4. The exact sequence is proprietary.