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Anti-Histone Deacetylase 4 Antibody

Catalog # AP60306

Product Information

Application	WB
Primary Accession	P56524
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken, Bovine, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	119040

Additional Information

Gene ID	9759
Other Names	KIAA0288; Histone deacetylase 4; HD4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Histone Deacetylase 4. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

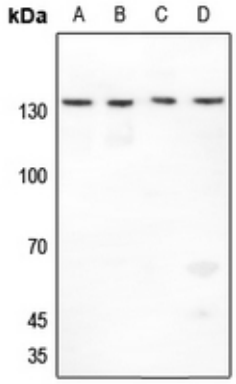
Protein Information

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.

Images



Western blot analysis of Histone Deacetylase 4 expression in Hela (A), H446 (B), mouse testis (C), rat lung (D) whole cell lysates. (Predicted band size: 119 kD; Observed band size: 140 kD)

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