

Anti-HDAC4/Histone Deacetylase 4 Rabbit Monoclonal Antibody

Catalog # ABO13702

Product Information

Application	WB, IF, ICC
Primary Accession	P56524
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-HDAC4/Histone Deacetylase 4 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human.

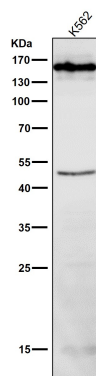
Additional Information

Gene ID	9759
Other Names	Histone deacetylase 4, HD4, 3.5.1.98, HDAC4 (HGNC:14063), KIAA0288
Calculated MW	119040
Application Details	WB 1:1000-1:2000 ICC/IF 1:50-1:200
Subcellular Localization	Nucleus. Cytoplasm. 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.
Tissue Specificity	Ubiquitous.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: HGI-8
Immunogen	A synthesized peptide derived from human HDAC4
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

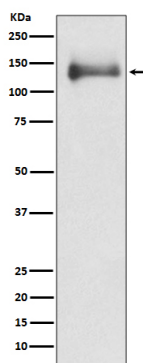
Protein Information

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



All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



Western blot analysis of HDAC4 expression in HeLa lysate.

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