

Anti-HDAC4 Antibody

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS17751

Product Information

Application	WB, IHC-P
Primary Accession	P56524
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	119040
Concentration (mg/ml)	0.5 mg/ml

Additional Information

Gene ID	9759
Alias Symbol	HDAC4
Other Names	HDAC4, BDMR, AHO3, Histone deacetylase A, HD4, HA6116, HDAC-A, HDACA, Histone deacetylase 4, HDAC-4, KIAA0288
Target/Specificity	The antibody detects ~140 kD HDAC-4. It does not cross-react with other HDAC proteins including HDAC1, 2, 3, 5, 6, 7, and 8.
Reconstitution & Storage	Affinity purified
Precautions	Anti-HDAC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

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