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HDAC5 Polyclonal Antibody

Catalog # AP70299

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9UQL6
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	121978

Additional Information

Gene ID	10014
Other Names	HDAC5; KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

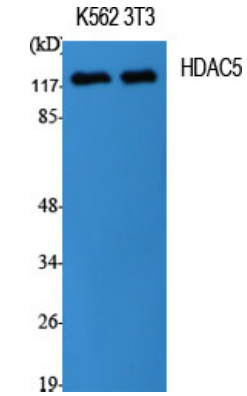
Name	HDAC5
Function	In vitro, it deacetylates lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed:10220385). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Involved in muscle maturation by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer. Serves as a corepressor of RARA and causes its deacetylation (PubMed:28167758). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:28167758).
Cellular Location	Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm. In muscle cells, it shuttles into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone

	protein and is due to its phosphorylation at Ser-259 and Ser-498 by AMPK, CaMK1 and SIK1
Tissue Location	Widely expressed. Expressed in the heart, brain, kidney, pancreas, liver, skeletal muscle, placenta (PubMed:10220385)

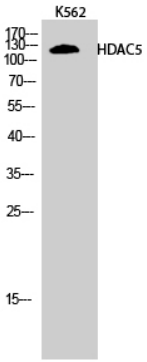
Background

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 by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer.

Images



Western Blot analysis of various cells using HDAC5 Polyclonal Antibody



Western Blot analysis of K562 cells using HDAC5 Polyclonal Antibody

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