

**HDAC4 Polyclonal Antibody**  
**Catalog # AP70298****Specification**

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**HDAC4 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P56524</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**HDAC4 Polyclonal Antibody - Additional Information****Gene ID** 9759**Other Names**

HDAC4; KIAA0288; Histone deacetylase 4; HD4

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**HDAC4 Polyclonal 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:<a href="http://www.uniprot.org/citations/27708256" target="\_blank">27708256</a>).

**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}

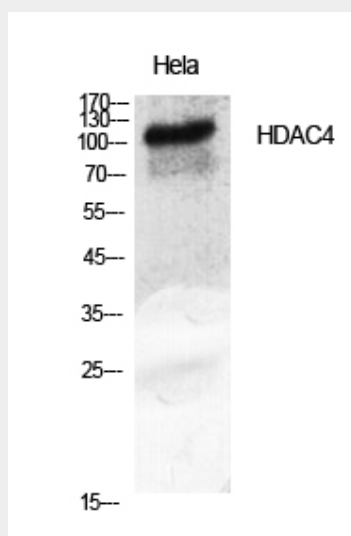
**Tissue Location**

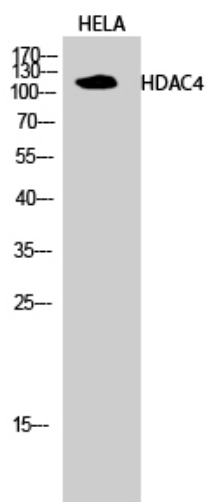
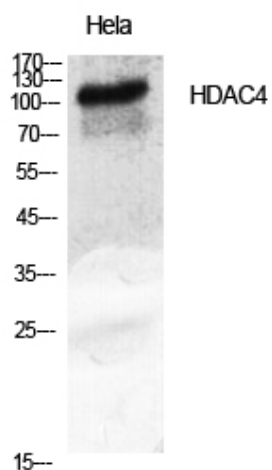
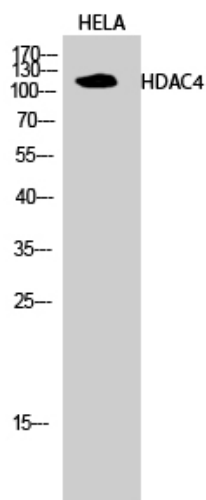
Ubiquitous.

**HDAC4 Polyclonal 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](#)

**HDAC4 Polyclonal Antibody - Images**



**HDAC4 Polyclonal Antibody - Background**

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