10320 Camino Santa Fe, Suite G
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HDAC4 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS12051

Specification

HDAC4 Antibody (N-Terminus) - Product Information

Application	**ICC, WB, IHC**
Primary Accession	P56524
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**119kDa KDa**

HDAC4 Antibody (N-Terminus) - Additional Information

Gene ID 9759

Other Names
Histone deacetylase 4, HD4, 3.5.1.98, HDAC4, KIAA0288

Target/Specificity
HDAC4

Reconstitution & Storage
Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions
HDAC4 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC4 Antibody (N-Terminus) - 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.

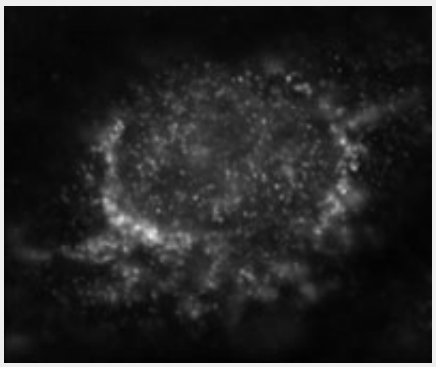
Volume
50 µl

HDAC4 Antibody (N-Terminus) - Protocols

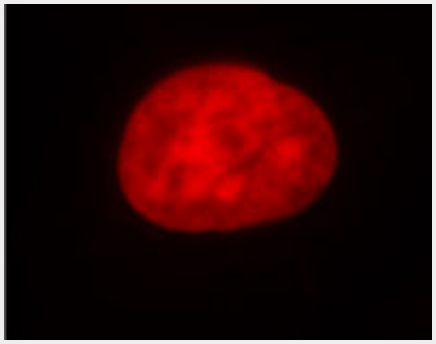
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HDAC4 Antibody (N-Terminus) - Images

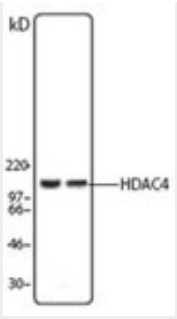


Fixed and permeabilized Hela cells were stained with a 1:50 dilution of HDAC4 antibody...

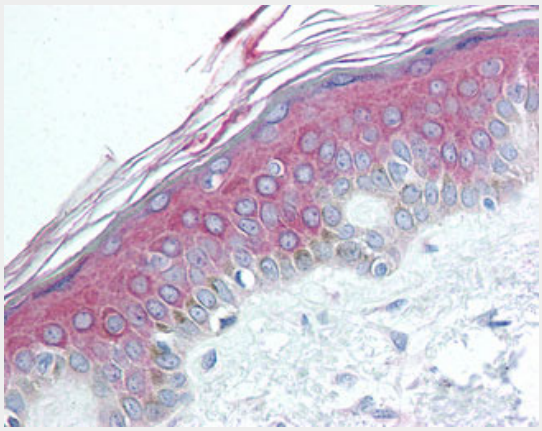


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NIH 3T3 (left lane) and Jurkat (right lane) nuclear extracts were probed with rabbit anti-HDAC4...



Anti-HDAC4 antibody IHC of human skin.

HDAC4 Antibody (N-Terminus) - Background

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HDAC4 Antibody (N-Terminus) - References

Grozinger C.M.,et al.Proc. Natl. Acad. Sci. U.S.A. 96:4868-4873(1999).
Ohara O.,et al.DNA Res. 4:53-59(1997).
Ohara O.,et al.Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.