10320 Camino Santa Fe, Suite G
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Anti-HDAC5 (RABBIT) Antibody
HDAC5 (internal) Antibody
Catalog # ASR5674

Specification

Anti-HDAC5 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-HDAC5 antibody has been tested in ELISA, dot blot, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~124 kDa corresponding to the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**HDAC5 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the internal region surrounding phosphoserine 661 of human HDAC5.**
Stabilizer	**50% (v/v) Glycerol**

Anti-HDAC5 (RABBIT) Antibody - Additional Information

Gene ID 10014

Other Names
10014

Purity
Anti-HDAC5 was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific towards HDAC5. A BLAST analysis was used to suggest cross-reactivity with Human based on 100% sequence homology. Cross-reactivity with HDAC5 from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

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Anti-HDAC5 (RABBIT) Antibody - Protein Information

Name HDAC5

Synonyms KIAA0600

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 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
Ubiquitous.

Anti-HDAC5 (RABBIT) 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 Cytomety
- Cell Culture

Anti-HDAC5 (RABBIT) Antibody - Images

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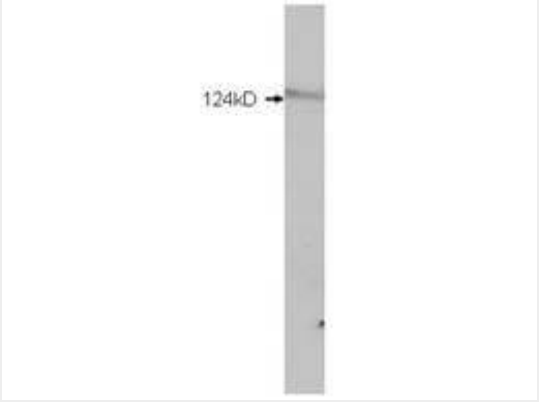

Western Blot of Rabbit anti-HDAC5 antibody. Lane 1: mouse brain extract. Load: 5 µg per lane. Primary antibody: HDAC5 antibody at 0.2 µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 124 kDa for HDAC5.

Anti-HDAC5 (RABBIT) Antibody - Background

HDAC5 is a member of the class II mammalian histone deacetylase family, which is structurally related to yeast HDA1. Human HDAC5 is composed of 1122 amino acid residues. The deacetylase domain of HDAC5 is located at the C-terminal half of the molecule. The N-terminal non-deacetylase domain does not show any significant homology with any published sequence. Both domains are required for HDAC5-mediated repression of gene transcription. HDAC5 interacts with a growing number of transcriptional factors including MEF2A as well as other HDAC proteins. The interacting complexes bind to specific regions of chromatin and regulate gene transcription in these regions. Anti-HDAC5 antibodies are ideal for researchers interested in Breast Cancer, Cancer, Cell Cycle and Replication, Chromatin Research, Epigenetics, and Histone Deacetylases research.