

Anti-HDAC5 (RABBIT) Antibody
HDAC5 (internal) Antibody
Catalog # ASR5716**Specification**

Anti-HDAC5 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-HDAC5 antibody has been tested by ELISA, Immunohistochemistry, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~122kDa 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	Anti-HDAC5 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the internal region surrounding 200-250aa of human HDAC5 protein.
Stabilizer	30% Glycerol

Anti-HDAC5 (RABBIT) Antibody - Additional Information**Gene ID** 10014**Purity**

Anti-HDAC5 was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with human, mouse, and primate 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.

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

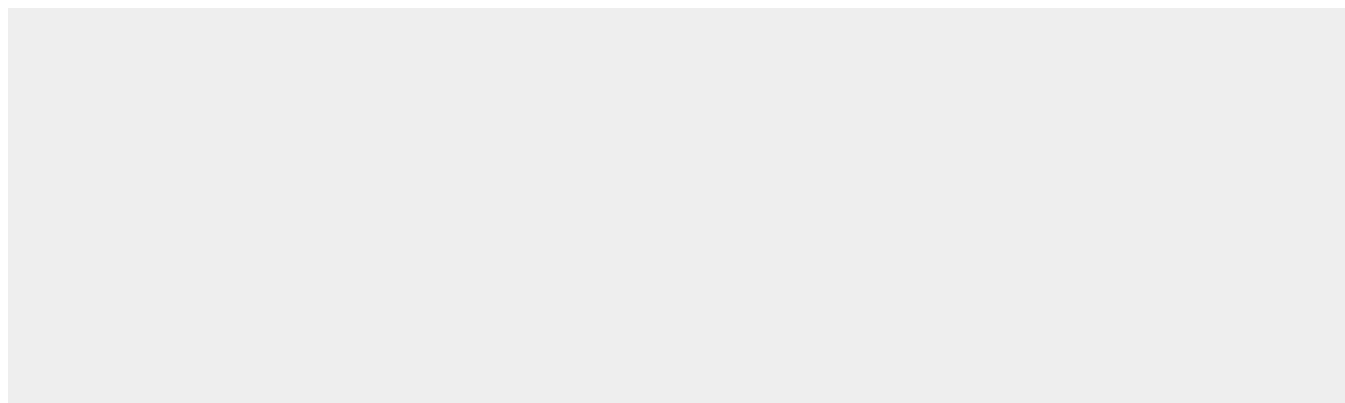
Ubiquitous.

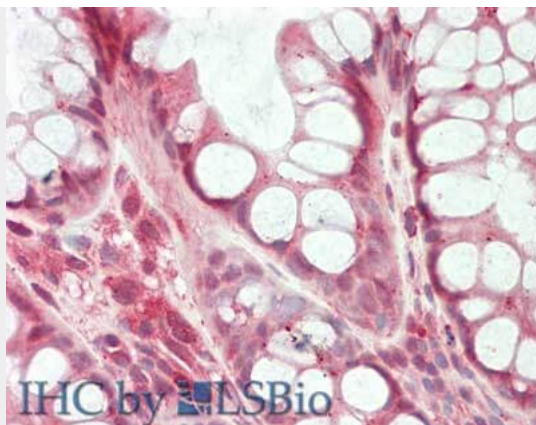
Anti-HDAC5 (RABBIT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-HDAC5 (RABBIT) Antibody - Images





Immunohistochemistry of Rabbit anti-HDAC5 antibody. Tissue: Colon. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: HDAC5 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: HDAC5 as precipitated red signal with hematoxylin purple nuclear counterstain.

Anti-HDAC5 (RABBIT) Antibody - Background

HDAC5 is a ubiquitous protein responsible for the deacetylation of lysine residues on the N-terminal part of the core histones. A tag for epigenetic repression, Anti-HDAC5 is an enzyme involved in transcriptional regulation, cell cycle progression and developmental events. HDAC5 is a class II histone deacetylase as defined by its similarities to other members of this class. HDAC5 is a major player in muscle differentiation, acting by repressing transcription of myocyte enhancer MEF2C. During differentiation it moves from the nucleus into the cytoplasm, allowing for myocyte enhancer factor expression. Anti-HDAC5 antibody is ideal for researchers interested in Stem Cell , Cardiovascular , or Epigenetics and Nuclear Signaling research.