

Anti-HDAC9 (RABBIT) Antibody

HDAC9 (N-terminus) Antibody Catalog # ASR5719

# Specification

# Anti-HDAC9 (RABBIT) Antibody - Product Information

| Host<br>Conjugate<br>Target Species<br>Reactivity<br>Clonality<br>Application<br>Application Note | Rabbit<br>Unconjugated<br>Human<br>Human<br>Polyclonal<br>WB, IHC, E, I, LCI<br>Anti-HDAC9 antibody is tested by<br>Immunohistochemistry and useful for<br>ELISA and Western Blot. Specific<br>conditions for reactivity should be<br>optimized by the end user. Expect a band<br>approximately ~111kDa corresponding to<br>the appropriate cell lysate or extract. |
|---|---|
| Physical State  | Liquid (sterile filtered)   |
| Buffer  | 0.02 M Potassium Phosphate, 0.15 M<br>Sodium Chloride, pH 7.2   |
| Immunogen   | Anti-HDAC9 affinity purified antibody was<br>prepared from whole rabbit serum<br>produced by repeated immunizations with<br>a synthetic peptide at the N-terminal of<br>human HDAC9 protein.  |
| Stabilizer  | 30% Glycerol  |

# Anti-HDAC9 (RABBIT) Antibody - Additional Information

Gene ID 9734

#### Purity

Anti-HDAC9 was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with human based on 100% sequence homology. Cross-reactivity with HDAC9 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-HDAC9 (RABBIT) Antibody - Protein Information



# Name HDAC9

Synonyms HDAC7, HDAC7B, HDRP, KIAA0744, MITR

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. Represses MEF2-dependent transcription.

Cellular Location Nucleus.

**Tissue Location** 

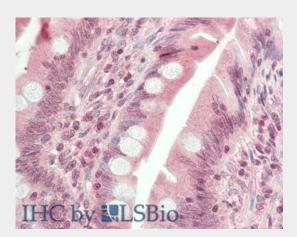
Broadly expressed, with highest levels in brain, heart, muscle and testis. Isoform 3 is present in human bladder carcinoma cells (at protein level).

# Anti-HDAC9 (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-HDAC9 (RABBIT) Antibody - Images



Immunohistochemistry of Rabbit anti-HDAC9 antibody. Tissue: Small Intestine. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: HDAC9 antibody at 5  $\mu$ g/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: HDAC9 as precipitated red signal with hematoxylin purple nuclear counterstain.

## Anti-HDAC9 (RABBIT) Antibody - Background

HDAC9 is located in the nucleus, expressed most highly in brain, heart, muscle, and testis. It is



responsible for the deacetylation of lysine residues on the N-terminal region of the core histones (H2A, H2B, H3 and H4). The result of deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. HDAC9 represses MEF2-dependent transcription by recruiting HDAC1 and 3. It appears to inhibit skeletal myogenesis and be a factor in heart development. By repressing JUN transcription via HDAC1 and inhibiting JUN phosphorylation by MAPK10, HDAC9 protects neurons from apoptosis. Anti-HDAC9 therefore is ideal for investigators interested in Cardiovascular or Epigenetics and Nuclear Signaling research.