

Anti-HDAC6 (RABBIT) Antibody

HDAC6 (internal) Antibody Catalog # ASR5688

Specification

Anti-HDAC6 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate **Unconjugated**

Target Species Human Reactivity Human Clonality **Polyclonal** Application WB, E, I, LCI

Application Note Anti-HDAC6 antibody is useful for ELISA,

immunohistochemistry, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~134kDa 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 HDAC6 affinity purified antibody was

prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding to the

internal region of human HDAC6.

Stabilizer 30% Glycerol

0.05% (w/v) Sodium Azide Preservative

Anti-HDAC6 (RABBIT) Antibody - Additional Information

Gene ID 10013

Purity

Anti-HDAC6 was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with monkey and human based on 100% sequence homology. Cross-reactivity with HDAC6 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-HDAC6 (RABBIT) Antibody - Protein Information



Name HDAC6 {ECO:0000303|PubMed:10220385, ECO:0000312|HGNC:HGNC:14064}

Function

Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed:10220385). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (PubMed: 10220385). Histone deacetylases act via the formation of large multiprotein complexes (PubMed:10220385). In addition to histones, deacetylates other proteins, such as CTTN, tubulin and SQSTM1 (PubMed:12024216, PubMed:20308065, PubMed:26246421, PubMed:30538141, PubMed:31857589). Plays a central role in microtubule-dependent cell motility by mediating deacetylation of tubulin (PubMed:12024216, PubMed:20308065, PubMed:26246421). Required for cilia disassembly; via deacetylation of alpha-tubulin (PubMed: 17604723, PubMed:26246421). Promotes deacetylation of CTTN, leading to actin polymerization, promotion of autophagosome-lysosome fusion and completion of autophagy (PubMed:30538141). Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer (PubMed:24413532). Promotes odontoblast differentiation following IPO7-mediated nuclear import and subsequent repression of RUNX2 expression (By similarity). In addition to its protein deacetylase activity, plays a key role in the degradation of misfolded proteins: when misfolded proteins are too abundant to be degraded by the chaperone refolding system and the ubiquitin-proteasome, mediates the transport of misfolded proteins to a cytoplasmic juxtanuclear structure called aggresome (PubMed:17846173). Probably acts as an adapter that recognizes polyubiquitinated misfolded proteins and target them to the aggresome, facilitating their clearance by autophagy (PubMed: 17846173).

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton. Nucleus {ECO:0000250|UniProtKB:Q9Z2V5}. Perikaryon {ECO:0000250|UniProtKB:Q9Z2V5}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q9Z2V5}. Cell projection, axon {ECO:0000250|UniProtKB:Q9Z2V5}. Cell projection, cilium. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, cilium basal body. Note=It is mainly cytoplasmic, where it is associated with microtubules

Anti-HDAC6 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation



Tel: 858.875.1900 Fax: 858.875.1999



- Flow Cytomety
- Cell Culture

Anti-HDAC6 (RABBIT) Antibody - Images

Anti-HDAC6 (RABBIT) Antibody - Background

HDAC6 antibody is a cytoplasmic enzyme that regulates many cellular functions. In particular it has been implicated in cell migrations, degradation of misfolded proteins, tubulin and HSP90 deacylation. Anti-HDAC6 antibody is ideal for researchers interested in Stem Cell and Epigenetics and Nuclear Signaling research.