

**Anti-HDAC6 (RABBIT) Antibody**  
**HDAC6 (near N-terminus) Antibody**  
**Catalog # ASR5689****Specification**

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**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 has been tested by western blot and is useful for ELISA and immunohistochemistry. 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 near the N-terminus of human HDAC6.
Stabilizer	30% Glycerol
Preservative	0.01% (w/v) Sodium Azide

**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:<a href="http://www.uniprot.org/citations/10220385" target="\_blank">10220385</a>). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (PubMed:<a href="http://www.uniprot.org/citations/10220385" target="\_blank">10220385</a>). Histone deacetylases act via the formation of large multiprotein complexes (PubMed:<a href="http://www.uniprot.org/citations/10220385" target="\_blank">10220385</a>). In addition to histones, deacetylates other proteins, such as CTTN, tubulin and SQSTM1 (PubMed:<a href="http://www.uniprot.org/citations/12024216" target="\_blank">12024216</a>, PubMed:<a href="http://www.uniprot.org/citations/20308065" target="\_blank">20308065</a>, PubMed:<a href="http://www.uniprot.org/citations/26246421" target="\_blank">26246421</a>, PubMed:<a href="http://www.uniprot.org/citations/30538141" target="\_blank">30538141</a>, PubMed:<a href="http://www.uniprot.org/citations/31857589" target="\_blank">31857589</a>). Plays a central role in microtubule-dependent cell motility by mediating deacetylation of tubulin (PubMed:<a href="http://www.uniprot.org/citations/12024216" target="\_blank">12024216</a>, PubMed:<a href="http://www.uniprot.org/citations/20308065" target="\_blank">20308065</a>, PubMed:<a href="http://www.uniprot.org/citations/26246421" target="\_blank">26246421</a>). Required for cilia disassembly; via deacetylation of alpha-tubulin (PubMed:<a href="http://www.uniprot.org/citations/17604723" target="\_blank">17604723</a>, PubMed:<a href="http://www.uniprot.org/citations/26246421" target="\_blank">26246421</a>). Promotes deacetylation of CTTN, leading to actin polymerization, promotion of autophagosome-lysosome fusion and completion of autophagy (PubMed:<a href="http://www.uniprot.org/citations/30538141" target="\_blank">30538141</a>). Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer (PubMed:<a href="http://www.uniprot.org/citations/24413532" target="\_blank">24413532</a>). 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:<a href="http://www.uniprot.org/citations/17846173" target="\_blank">17846173</a>). Probably acts as an adapter that recognizes polyubiquitinated misfolded proteins and target them to the aggresome, facilitating their clearance by autophagy (PubMed:<a href="http://www.uniprot.org/citations/17846173" target="\_blank">17846173</a>).

### 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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.