

# Anti-HDAC6/Histone Deacetylase 6 Rabbit Monoclonal Antibody

Catalog # ABO13696

## Specification

## Anti-HDAC6/Histone Deacetylase 6 Rabbit Monoclonal Antibody - Product Information

ApplicationWB, IHC, IF, ICC, IPPrimary AccessionO9UBN7HostRabbitIsotypeRabbit IgGReactivityHumanClonalityMonoclonalFormatLiquidDescriptionAnti HDAC6/Histona Descetulase & Pabhit Meneclonal Antibady. Tester

Anti-HDAC6/Histone Deacetylase 6 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human.

## Anti-HDAC6/Histone Deacetylase 6 Rabbit Monoclonal Antibody - Additional Information

Gene ID 10013

**Other Names** Histone deacetylase 6, HD6, 3.5.1.98, Protein deacetylase HDAC6, 3.5.1.-, Tubulin-lysine deacetylase HDAC6, 3.5.1.-, HDAC6 {ECO:0000303|PubMed:10220385, ECO:0000312|HGNC:HGNC:14064}

Calculated MW 131419 MW KDa

Application Details WB 1:5000-1:20000<br>IHC 1:50-1:200<br>ICC/IF 1:100-1:500<br>IP 1:50

**Subcellular Localization** Nucleus. Cytoplasm. Perikaryon. Cell projection, dendrite. Cell projection, axon. It is mainly cytoplasmic, where it is associated with microtubules.

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human HDAC6

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.



## Anti-HDAC6/Histone Deacetylase 6 Rabbit Monoclonal 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 histories (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/Histone Deacetylase 6 Rabbit Monoclonal Antibody - Protocols

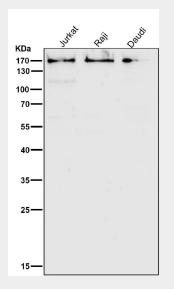
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides



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

Anti-HDAC6/Histone Deacetylase 6 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:1W dilution for 1 hour at room temperature.

KDa 250 — 1 150 — 100 — 75 — 75 — 75 — 75 — 75 — 75 — 75 —	-
50 <u> </u> 37 <u> </u>	
25 — 20 — 15 — 10 —	

Western blot analysis of HDAC6 expression in HeLa cell lysate.