

# **Anti-HDAC6 Antibody**

Mouse Monoclonal Antibody Catalog # AP53478

## **Specification**

# **Anti-HDAC6 Antibody - Product Information**

Application WB
Primary Accession Q9UBN7
Other Accession NM\_006044
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG2a

Immunogen Purified recombinant human HDAC6

protein expressed in E.coli.

Purification Affinity purified Calculated MW 160KDa KDa

# **Anti-HDAC6 Antibody - Additional Information**

**Gene ID** 10013

## **Other Names**

FLJ16239 ;HD 6 ;HDAC 6 ;HDAC6 ;HDAC6\_HUMAN ;Histone deacetylase 6 (HD6) ;Histone deacetylase 6 ;JM 21 ;JM21 ;KIAA0901 ;OTTHUMP00000032398 ;OTTHUMP00000197663

### **Dilution**

WB~~1:1000

#### **Format**

Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

## **Storage**

Store at -20 °C. Stable for 12 months from date of receipt

# **Anti-HDAC6 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

target="\_blank">10220385</a>). Histone deacetylases act via the formation of large multiprote 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/31857589" target=" blank">31857589</a>, PubMed:<a href="http://www.uniprot.org/citations/30538141" target=" blank">30538141</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

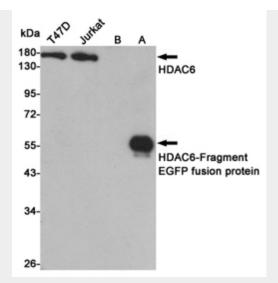
# **Anti-HDAC6 Antibody - Protocols**

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>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-HDAC6 Antibody - Images**





Western blot detection of HDAC6 in T47D, Jurkat CHO-K1(B) and CHO-K1 transfected by HDAC6-fragment EGFP fusion protein Acel lysates using HDAC6 mouse mAb (1:1000 diluted).

# Anti-HDAC6 Antibody - Background

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 progr