

# Hdac6 Antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI11451

## **Product Information**

Application	WB, CHIP
Primary Accession	<u>Q9Z2V5</u>
Other Accession	<u>NM_010413</u> , <u>NP_034543</u>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	125787
Reactivity Predicted Host Clonality	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine Human, Mouse, Rat, Pig, Dog, Bovine Rabbit Polyclonal

## **Additional Information**

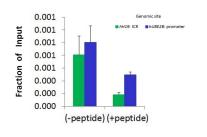
Gene ID	15185
Alias Symbol Other Names	Hd6, Hdac5, Sfc6, mHDA2 Histone deacetylase 6, HD6, 3.5.1.98, Histone deacetylase mHDA2, Hdac6
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Hdac6 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Hdac6 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

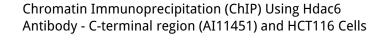
#### **Protein Information**

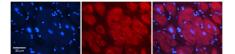
Name	Hdac6 {ECO:0000312 MGI:MGI:1333752}
Function	Deacetylates a wide range of non-histone substrates (PubMed: <u>12606581</u> , PubMed: <u>19893491</u> , PubMed: <u>26746851</u> , PubMed: <u>27737934</u> ). Plays a central role in microtubule-dependent cell motility by mediating deacetylation of tubulin (PubMed: <u>19893491</u> , PubMed: <u>27737934</u> , PubMed: <u>12606581</u> ). Required for cilia disassembly via deacetylation of alpha-tubulin (By similarity). Alpha-tubulin deacetylation results in destabilization of dynamic microtubules (PubMed: <u>12486003</u> ). Promotes deacetylation of CTTN, leading to actin polymerization, promotion of autophagosome-lysosome fusion and completion of autophagy (By similarity). Deacetylates SQSTM1 (By similarity). Deacetylates peroxiredoxins PRDX1 and PRDX2, decreasing their reducing activity (By similarity). Deacetylates antiviral protein RIGI in the presence of

	viral mRNAs which is required for viral RNA detection by RIGI (PubMed: <u>26746851</u> ). Sequentially deacetylates and polyubiquitinates DNA mismatch repair protein MSH2 which leads to MSH2 degradation, reducing cellular sensitivity to DNA-damaging agents and decreasing cellular DNA mismatch repair activities (By similarity). Deacetylates DNA mismatch repair protein MLH1 which prevents recruitment of the MutL alpha complex (formed by the MLH1-PMS2 heterodimer) to the MutS alpha complex (formed by the MSH2-MSH6 heterodimer), leading to tolerance of DNA damage (By similarity). Deacetylates RHOT1/MIRO1 which blocks mitochondrial transport and mediates axon growth inhibition (By similarity). Deacetylates transcription factor SP1 which leads to increased expression of ENG, positively regulating angiogenesis (By similarity). Deacetylates KHDRBS1/SAM68 which regulates alternative splicing by inhibiting the inclusion of CD44 alternate exons (By similarity). Promotes odontoblast differentiation following IPO7- mediated nuclear import and subsequent repression of RUNX2 expression (PubMed: <u>35922041</u> ). 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 (By similarity). Probably acts as an adapter that recognizes polyubiquitinated misfolded proteins and target them to the aggresome, facilitating their clearance by autophagy (PubMed: <u>22819792</u> ).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton. Nucleus. Perikaryon. Cell projection, dendrite. Cell projection, axon. Cell projection, cilium {ECO:0000250 UniProtKB:Q9UBN7}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250 UniProtKB:Q9UBN7} Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250 UniProtKB:Q9UBN7}. Note=Mainly cytoplasmic where it is associated with microtubules (PubMed:10873806, PubMed:19893491). Can shuttle between the cytoplasm and the nucleus (PubMed:10873806). Found exclusively in the cytoplasm in proliferative cells with a fraction found in the nucleus during differentiation (PubMed:10873806)
Tissue Location	Expressed in neurons of the cortex. Expressed in Purkinje cells. Detected in keratinocytes (at protein level)

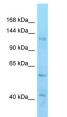
#### Images







Rabbit Anti-Hdac6 Antibody Catalog Number: AI11451 Formalin Fixed Paraffin Embedded Tissue: Human Adult heart Observed Staining: Cytoplasmic Primary Antibody Concentration: 1:600 Secondary Antibody: Donkey anti-Rabbit-Cy2/3 Secondary Antibody Concentration: 1:200 Magnification: 20X Exposure Time: 0.5 □€" 2.0 sec Protocol located in Reviews and Data.



WB Suggested Anti-Hdac6 Antibody Titration: 1.0  $\mu g/ml$  Positive Control: Mouse Testis

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.