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Hdac6 Antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI11451

Product Information

Application WB, CHIP Primary Accession Q9Z2V5

Other Accession NM 010413, NP 034543

Reactivity Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine

Predicted Human, Mouse, Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 125787

Additional Information

Gene ID 15185

Alias Symbol Hd6, Hdac5, Sfc6, mHDA2

Other Names 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: 12486003). 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:35922041). 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:22819792).

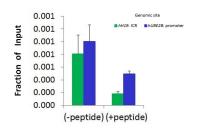
Cellular Location

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)

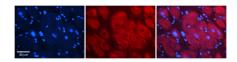
Tissue Location

Expressed in neurons of the cortex. Expressed in Purkinje cells. Detected in keratinocytes (at protein level)

Images



Chromatin Immunoprecipitation (ChIP) Using Hdac6 Antibody - C-terminal region (AI11451) and HCT116 Cells



Rabbit Anti-Hdac6 Antibody Catalog Number: AI11451

Formalin Fixed Paraffin Embedded Tissue: Human Adult

heart Observed Staining: Cytoplasmic

Primary Antibody Concentration: 1:600

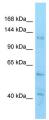
Secondary Antibody: Donkey anti-Rabbit-Cy2/3

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'.