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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: 12606581, PubMed:19893491, PubMed:26746851, PubMed:27737934, PubMed:35075301). Plays a central role in microtubule-dependent cell motility by mediating deacetylation of tubulin (PubMed:19893491, PubMed:27737934, PubMed:12606581). 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:26746851). 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). Deacetylates PRDM16 (PubMed:35075301). 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).

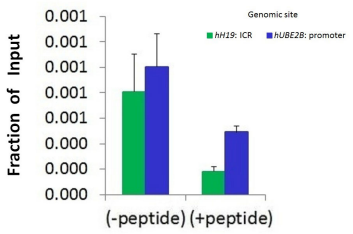
Cellular Location

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)

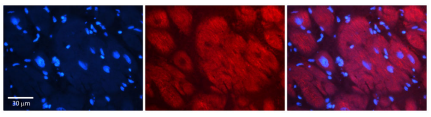
Tissue Location

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

Images

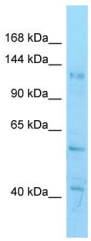


Chromatin Immunoprecipitation (ChIP) Using Hdac6 Antibody - C-terminal region (AI11451) and HCT116 Cells



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 â€“ 2.0 sec
Protocol located in Reviews and Data.



WB Suggested Anti-Hdac6 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Testis

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