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Hdac3 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12154

Product Information

Application	WB
Primary Accession	Q6P6W3
Other Accession	NM_053448, NP_445900
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine, Yeast
Predicted	Human, Mouse, Rat, Zebrafish, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48821

Additional Information

Gene ID	84578
Alias Symbol	Hdac3
Other Names	Histone deacetylase 3, HD3, 3.5.1.98, Hdac3
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-Hdac3 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	Hdac3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

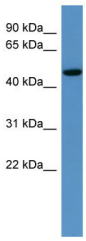
Name	Hdac3
Function	Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4), and some other non-histone substrates. Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes, such as N-Cor repressor complex, which activate the histone deacetylase activity. Participates in the BCL6 transcriptional repressor activity by deacetylating the H3 'Lys-27' (H3K27) on enhancer elements, antagonizing EP300 acetyltransferase activity and repressing proximal gene expression (By similarity). Acts as a molecular

chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation (By similarity). Contributes, together with XBP1 isoform 1, to the activation of NFE2L2-mediated HMOX1 transcription factor gene expression in a PI(3)K/mTORC2/Akt-dependent signaling pathway leading to endothelial cell (EC) survival under disturbed flow/oxidative stress (By similarity). Regulates both the transcriptional activation and repression phases of the circadian clock in a deacetylase activity-independent manner. During the activation phase, promotes the accumulation of ubiquitinated BMAL1 at the E-boxes and during the repression phase, blocks FBXL3-mediated CRY1/2 ubiquitination and promotes the interaction of CRY1 and BMAL1. The NCOR1-HDAC3 complex regulates the circadian expression of the core clock gene BMAL1 and the genes involved in lipid metabolism in the liver (By similarity). Also functions as a deacetylase for non-histone targets, such as KAT5, MEF2D, MAPK14, RARA and STAT3. Serves as a corepressor of RARA, mediating its deacetylation and repression, leading to inhibition of RARE DNA element binding. In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response. In addition to protein deacetylase activity, also acts as a protein-lysine deacylase by recognizing other acyl groups: catalyzes removal of (2E)-butenoyl (crotonyl), lactoyl (lactyl), 2-hydroxyisobutanoyl (2-hydroxyisobutyryl) and isonicotinyl acyl groups from lysine residues, leading to protein decrotonylation, delactylation, de-2-hydroxyisobutyrylation and deisonicotinylation, respectively (By similarity). Catalyzes decrotonylation of MAPRE1/EB1 (By similarity). Mediates delactylation NBN/NBS1, thereby inhibiting DNA double-strand breaks (DSBs) via homologous recombination (HR) (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:O15379}. Chromosome {ECO:0000250|UniProtKB:O15379}. Cytoplasm {ECO:0000250|UniProtKB:O15379}. Cytoplasm, cytosol {ECO:0000250|UniProtKB:O15379}. Note=Colocalizes with XBP1 and AKT1 in the cytoplasm. Predominantly expressed in the nucleus in the presence of CCAR2. {ECO:0000250|UniProtKB:O15379}

Images



WB Suggested Anti-Hdac3 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:12500
Positive Control: Rat Liver

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