

HDAC-6 Blocking Peptide

Catalog # PBV10260b

Specification

HDAC-6 Blocking Peptide - Product Information

Primary Accession Q9Z2V5
Gene ID 15185
Calculated MW 125787

HDAC-6 Blocking Peptide - Additional Information

Gene ID 15185

Application & Usage The peptide is used for blocking the

antibody activity of HDAC-6. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for

30-60 minutes at 37°C.

Other Names

Histone deacetylase 6, HD6, 3.5.1.98, Histone deacetylase mHDA2, Hdac6

Target/Specificity

HDAC-6

Formulation

 $50~\mu g$ (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

HDAC-6 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC-6 Blocking Peptide - Protein Information

Name Hdac6 {ECO:0000312|MGI:MGI:1333752}

Function

Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed:9891014). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental



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events (PubMed: 9891014). Histone deacetylases act via the formation of large multiprotein complexes (PubMed:9891014). In addition to histones, deacetylates other proteins, such as CTTN, tubulin and SQSTM1 (PubMed: 19893491, PubMed:27737934). Plays a central role in microtubule-dependent cell motility by mediating deacetylation of tubulin (PubMed:19893491, PubMed:27737934). Required for cilia disassembly; via deacetylation of alpha-tubulin (By similarity). Promotes deacetylation of CTTN, leading to actin polymerization, promotion of autophagosome-lysosome fusion and completion of autophagy (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=It is mainly cytoplasmic, where it is associated with microtubules.

Tissue Location

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

HDAC-6 Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

HDAC-6 Blocking Peptide - Images