

HDAC6 antibody (pAb)

Catalog No: 40971

RRID: AB_2793464

Application(s): ChIP, WB

Reactivity: Human, Mouse

Quantity: 100 µg

Purification: Affinity Purified

Host: Rabbit

Isotype: IgG

Concentration: 1 µg/µl

Molecular Weight: 134 kDa

Background: HDAC6 (Histone Deacetylase 6) is a member of the class IIb mammalian histone deacetylases (HDACs) involved in regulating chromatin structure during transcription. These enzymes catalyze the removal of acetyl groups from lysine residues of histones or many cellular proteins. Lysine N-ε-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in regulation of gene expression in various cellular functions. It consists of the transfer of an acetyl moiety from an acetyl coenzyme A to the ε-amino group of a lysine residue. *In vivo*, acetylation is controlled by the antagonistic activities of histone acetyltransferases (HATs) and histone deacetylases (HDACs). The HDACs are grouped into four classes, on the basis of similarity to yeast counterparts: HDAC class I (HDAC1, HDAC2, HDAC3 and HDAC8), class II (HDAC4, HDAC5, HDAC6, HDAC7, 9 and 10), class III (SIRT1-7) and class IV (HDAC11).

HDAC6 is a unique enzyme that harbors a full duplication of its deacetylase homology region, which appears to contribute independently to the overall activity of HDAC6 protein. alpha-tubulin and HSP90 are two known substrates of HDAC6, playing an important role in cellular mechanisms related to the microtubule network and HSP90-dependent events. HDAC6 also participates in regulating expression of a group of genes involved in the remodeling of chromatin during cell differentiation.

Immunogen: This HDAC6 antibody was raised against a synthetic peptide corresponding to amino acid residues 1-16 of human HDAC6.

Buffer: PBS containing 0.02% sodium azide. Sodium azide is highly toxic.

Application Notes:

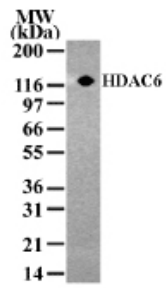
Applications Validated by Active Motif:

WB: 1 - 2 µg/ml dilution

For optimal results in Western blotting, primary antibody incubations should be performed at room temperature. The addition of 0.1% Tween 20 to all blocking solutions may also reduce background. Individual optimization may be required.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Store at 4°C for short term. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

**HDAC6 pAb tested by Western blot.**

Detection of HDAC6 by Western blot. The analysis was performed using NIH/3T3 nuclear extract and HDAC6 pAb. A protein band of approximate molecular weight of 134 kDa was detected.