

## HDAC5 antibody (pAb)

**Catalog No:** 40970**RRID:** AB\_2614943**Application(s):** ChIP, IP, WB**Reactivity:** Human, Mouse**Quantity:** 100 µg**Purification:** Affinity Purified**Host:** Rabbit**Isotype:** IgG**Concentration:** 0.5 µg/µl**Molecular Weight:** 120 kDa

**Background:** HDAC5 (Histone Deacetylase 5) is a member of the class IIa mammalian histone deacetylases (HDACs) involved in regulating chromatin structure during transcription. These enzymes catalyze the removal of acetyl groups from lysine residues of histones and other 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).

Like HDAC4, HDAC5 shuttles between the nucleus and cytoplasm. In muscle cells, this protein shuttles into the cytoplasm during myocyte differentiation. HDAC5 interacts with many different transcription factors including HDAC3, and may form multi-complex proteins.

**Immunogen:** This HDAC5 antibody was raised against a synthetic peptide corresponding to amino acid residues 572-587 of human HDAC5.

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

**Application Notes:**

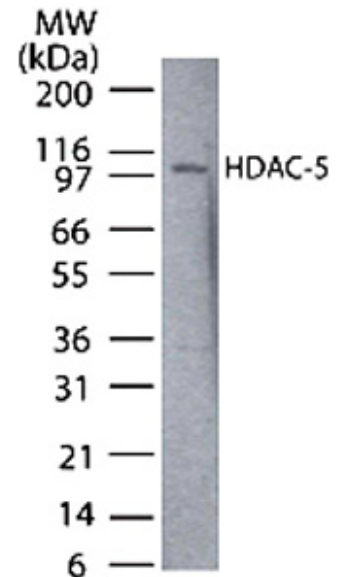
Applications Validated by Active Motif:

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.



**HDAC5 antibody tested by Western blot.**  
Detection of HDAC5 by Western blot. NIH/3T3 cell extract was blotted and probed with HDAC5 antibody at a 2 µg/ml dilution.