

## HDAC9 antibody (pAb)

**Catalog Nos:** 39793, 39794**RRID:** AB\_2793345**Isotype:** Serum**Application(s):** WB**Reactivity:** Human**Volumes:** 100 µl, 10 µl**Purification:** None**Host:** Rabbit**Molecular Weight:** 145 kDa

**Background:** HDAC9 (Histone Deacetylase 9) is a class II mammalian histone deacetylase (HDAC) 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). In humans, expression of HDAC9 is expressed in a wide variety of tissues. It interacts with HDAC1, HDAC3, and probably with HDAC4 and HDAC5. It also interacts with CTBP1, MEF2, MAPK10, ETV6, NCOR1 and BCL6.

**Immunogen:** This HDAC9 antibody was raised against a peptide derived from the C-terminus of human HDAC9.

**Buffer:** Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

**Application Notes:**

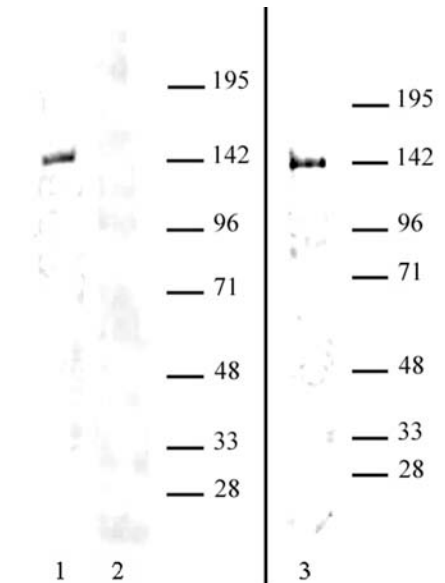
Applications Validated by Active Motif:

WB\*: 1:500 - 1:2,000 dilution

\*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. 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.

**HDAC9 antibody tested by Western blot.**

Detection of HDAC9 by Western blot. HeLa nuclear extract (lanes 1 and 2, 20 µg) and MCF-7 nuclear extract (lane 3, 20 µg) probed with HDAC9 antibody (pab) (1:1,000 dilution). Lane 2: pre-incubation of antibody with immunizing peptide.