Histone H4K8ac antibody (pAb)

Catalog Nos: 39171, 39172

RRID: AB_2793172
Isotype: Serum
Application(s): WB
Reactivity: Human, Wide Range Predicted

Volumes: 200 µl, 10 µl
Purification: None
Host: Rabbit
Molecular Weight: 8 kDa

Background: Histone H4 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points; it is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation; they play a major role in regulating gene expression.

Lysine N-ε-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in chromatin remodeling and in the regulation of gene expression in various cellular functions. The chromatin-remodeling complex SWI/SNF is recruited to promoters through the interaction of the bromodomain of the protein BRG1, belonging to the SWI/SNF complex, and CBP-acetylated histone H4 Lysine 8, leading to a chromatin remodeling.

Immunogen: This Histone H4 acetyl Lys8 antibody was raised against a peptide including acetyl-lysine 8 of histone H4.

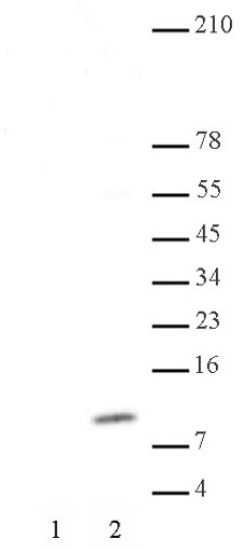
Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:
Applications Validated by Active Motif:
WB*: 1:500 - 1:4,000 dilution

For optimal results in Western blotting, primary antibody incubations should be performed overnight at 4°C. Individual optimization may be required.

*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.



Histone H4 acetyl Lys8 pAb tested by Western blot.
Detection of acetylated Histone H4 by Western blot analysis using 10 µg HeLa acid extracts and Histone H4 acetyl Lys8 pAb at a 1:1,000 dilution.
Lane 1: Acid extract of untreated HeLa cells.
Lane 2: Acid extract of HeLa cells treated with sodium butyrate.