

Histone H2A, acidic patch antibody (pAb)

Catalog Nos: 39111, 39112

RRID: AB_2793159

Isotype: Serum

Application(s): ChIP, WB

Reactivity: Human, Wide Range Predicted

Volumes: 200 µl, 10 µl

Purification: None

Host: Rabbit

Molecular Weight: 14 kDa

Background: Histone H2A 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.

Immunogen: This Histone H2A, acidic patch antibody was raised against a peptide including amino acids 89-91 of histone H2A.

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

Application Notes:

Applications Validated by Active Motif:

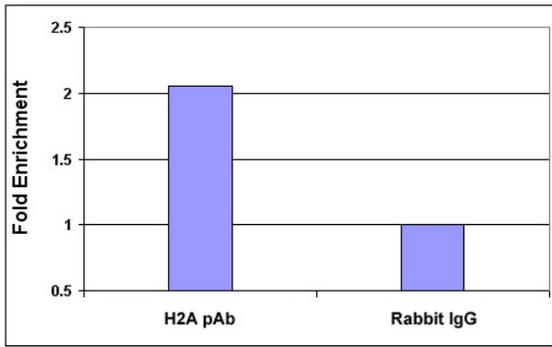
ChIP: 10 µl per ChIP

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.



Histone H2A, acidic patch pAb tested by ChIP analysis.

Chromatin IP performed using the ChIP-IT[®] Express Kit (Catalog No. 53008) and HeLa Chromatin (1.5×10^6 cell equivalents per ChIP) using 10 μ l of Histone H2A, acidic patch pAb or the equivalent amount of rabbit IgG as a negative control. Real time, quantitative PCR (RT-qPCR) was performed on DNA purified from each of the ChIP reactions using a primer pair specific for the PABPC1 gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.

Histone H2A, acidic patch pAb tested by Western blot.

Detection of Histone H2A by Western blot. The analysis was performed using recombinant histone H2A protein (200 ng, lane 1) and acid extract of HeLa cells (5 μ g, lane 2) probed with Histone H2A, acidic patch pAb (1:1,000 dilution).

