

Histone H2AQ104me1 antibody (pAb)

Catalog Nos: 61605, 61606

RRID: AB_2793698

Isotype: IgG

Application(s): DB, WB

Reactivity: Human, Wide Range Predicted

Volumes: 100 μ l, 10 μ l

Purification: Affinity Purified

Host: Rabbit

Concentration: 1.32 μ g/ μ l

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. Methylation on glutamine 104 has been implicated in RNA Pol-I transcriptional regulation.

Immunogen: This antibody was raised against a peptide containing human histone H2AQ104me1.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

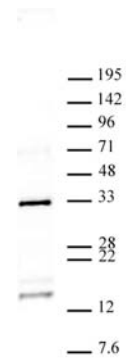
Applications Validated by Active Motif:

WB*: 1:500 - 1:1,000 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.

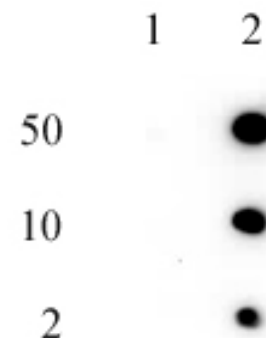
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product 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 H2AQ104me1 antibody (pAb) tested by Western blot.

Histone H2AQ104me1 detection by Western blot. The analysis was performed using 30 μ g of HeLa nuclear cell extract and Histone H2AQ104me1 antibody at a 1:500 dilution.



Histone H2AQ104me1 (pAb) tested by dot blot analysis.

Dot blot analysis was used to confirm the specificity of Histone H2AQ104me1 pAb for monomethyl-glu104 of histone H2A. Decreasing amounts of modified and unmodified peptides were spotted onto PVDF and probed with the antibody at a dilution of 1:5,000.

Lane 1: Unmodified glutamine 104 of H2A peptide.

Lane 2: Monomethylated glutamine 104 of