

Histone H4 antibody (mAb)

Catalog No: 61521 RRID: AB 2793667

Clone: MABI 0400 Isotype: IgG2b Application(s): ChIP, WB Reactivity: Human, Wide Range Predicted Quantity: 100 µg Purification: Protein G Chromatography Host: Mouse Concentration: 0.7 µg/µl 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.

Immunogen: This antibody was raised against a synthetic peptide containing human Histone H4.

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: ChIP: 2 - 5 µg per ChIP WB*: 0.5 - 2 µg/ml 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.

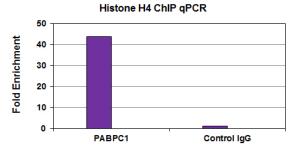
For Histone H4, we also offer AbFlex[®] Histone H4 Recombinant Antibody (rAb). For details, see Catalog No. 91295.

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.

This antibody is manufactured by MAB Institute, Inc.





Histone H4 antibody (mAb) tested by ChIP analysis.

ChIP performed using the ChIP-IT[®] Express Kit (Catalog No. 53008) and HeLa Chromatin (1.5 x 10⁶ cell equivalents per ChIP) using 3 µg of Histone H4 (mAb) or the equivalent amount of mouse 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 antibody versus control IgG (ddCT method).

$\begin{array}{c} - 195 \\ - 142 \\ - 96 \\ - 71 \\ - 48 \\ - 33 \\ - 28 \\ - 12 \\ - 7.6 \\ \end{array}$

Histone H4 antibody (mAb) tested by Western blot.

Nuclear extract (20 µg) of HeLa cells probed with the Histone H4 antibody at 2 µg/ml.