

## Histone H3 antibody (mAb)

Catalog Nos: 61475, 61976, 61476

RRID: AB\_2687473 Clone: 1B1-B2 Isotype: IqG3

**Application(s):** ChIP, ChIP-Seq, WB **Reactivity:** Human, Wide Range Predicted

Quantities: 100 µg, 50 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse

Concentration: 0.89 µg/µl Molecular Weight: 17 kDa

**Background:** Histone H3 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). 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; these modifications play a major role in regulating gene expression.

Immunogen: This antibody was raised against a peptide within the C-terminal region of human histone H3.

**Buffer:** Purified IgG in 100mM sodium phosphate pH 8.0, 90mM trisodium citrate, 430mM sodium chloride. If crystals are noted, warm to room temperature and mix gently before use.

## **Application Notes:**

Validated Applications: ChIP-Seq: 4 µg per ChIP ChIP: 5 µg per ChIP WB: 1 - 4 µg/ml dilution

**Published Applications:** 

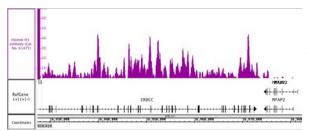
WB

**References:** Histone H3 antibody has been cited in one or more publications. To see an up-to-date listing of papers that describe its use, please go to <a href="https://www.activemotif.com/catalog/details/61475">www.activemotif.com/catalog/details/61475</a>.

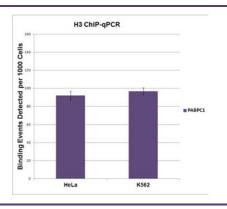
**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Upon receipt, unconjugated antibodies may be stored at -20°C for up to 2 years. Fluorophore- & enzyme-conjugated antibodies should be stored at 4°C. Fluorophore-conjugated antibodies should be protected from light. Keep reagents on ice when not in storage; to avoid repeated freeze/thaw cycles, we recommend aliquoting items that will be stored frozen into single-use fractions prior to freezing. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.





Histone H3 antibody (mAb) tested by ChIP-Seq.Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT<sup>®</sup> High Sensitivity Kit (Cat. No. 53040) with 30 μg of chromatin from Farage human lymph-node derived B cells and 5 μl Histone H3 antibody. ChIP DNA was sequenced on the Illumina HiSeq and 16.7 million sequence tags were mapped to identify Histone H3 binding sites.



## H3 antibody (mAb) tested by ChIP.

ChIP was performed using the ChIP-IT High Sensitivity Kit (Cat. No. 53040) with 15  $\mu$ g of chromatin from both HeLa and K562 cells and 4  $\mu$ g H3 antibody. ChIP DNA was used in qPCR with the gene-specific primer as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



## Histone H3 antibody (mAb) (Clone 1B1-B2) tested by Western blot.

Histone H3 antibody detection by Western blot. The analysis was performed using 20  $\mu$ g of HeLa nuclear extract and Histone H3 antibody at a 0.25  $\mu$ g/ml dilution.