

Histone H3 antibody (mAb)

Catalog Nos: 61647, 61648

RRID: AB_2687567

Clone: 1C8B2

Isotype: IgG2b

Application(s): ICC, IF, WB

Reactivity: Human, Wide Range Predicted

Quantities: 100 µg, 10 µg

Purification: Protein G Chromatography

Host: Rat

Concentration: 1 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). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points. Histone H1 is responsible for establishing higher-order chromatin structure.

Each histone contains two domains. First, a main globular domain (C-terminal) forming the core of the nucleosome is involved in histone-histone interactions and in binding to the DNA. Secondly, an N-terminal tail is subject to post-translational modifications. 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 corresponding to amino acid residue(s) 1-19 of human Histone H3.

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:

ICC/IF: 2 - 10 µg/ml dilution

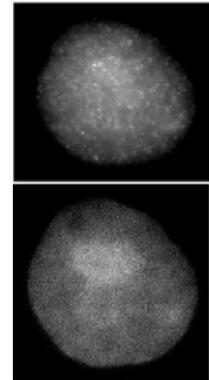
WB*: 0.5 - 2 µg/ml dilution

*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 H3, we also offer AbFlex® Histone H3 Recombinant Antibody (rAb). For details, see Catalog No. 91297.

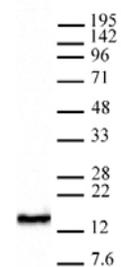
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product 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 H3 antibody (mAb) (Clone 1C8B2) tested by immunofluorescence.

Top: HeLa cells stained with Histone H3 antibody (mAb). Bottom: Hoechst staining.



Histone H3 antibody (mAb) (Clone 1C8B2) tested by Western blot.

HeLa cell nuclear extract (20 µg) was probed with antibody at 1 µg/ml.