

Histone H3S28ph antibody (mAb)

Catalog Nos: 61695, 61696

RRID: AB_2732838

Clone: 5F9A9

Isotype: IgG2b

Application(s): ICC, IF, WB

Reactivity: Human, Wide Range Predicted

Quantities: 100 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse

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). 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.

Ser10 phosphorylation and Ser28 phosphorylation in the tail of H3 have very similar kinetics. Both phosphorylations occur early in mitosis when chromosomes begin to condense and during premature chromosome condensation induced in S-phase cells. These phosphorylated serines are excellent mitotic markers. In contrast to Ser10 phosphorylation, Ser28 phosphorylation has never been observed in interphase.

Immunogen: This antibody was raised against a peptide corresponding to phosphoserine 28 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:

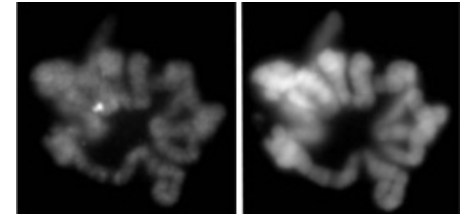
ICC/IF: 2 - 10 µg/ml dilution

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.

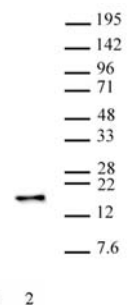
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product 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 H3S28ph antibody (mAb) (Clone 5F9A9) tested by Immunofluorescence.

Left: Formaldehyde fixed mitotic DM4 cell stained with Histone H3S28ph antibody (mAb). Right: Hoechst stain.



Histone H3S28ph antibody (mAb) (Clone 5F9A9) tested by Western blot.

Detection of Histone H3S28ph antibody by Western blot. The analysis was performed using 20 µg of untreated (lane 1) or colcemid treated (lane 2) HeLa nuclear extract with Histone H3S28ph antibody at a 1 µg/ml dilution.