

Histone H3K4K9K18 (pan-biotinylated) antibody (pAb)

Catalog Nos: 61391, 61392

RRID: AB_2793616

Isotype: IgG

Application(s): DB, ICC, IF, WB

Reactivity: Human, Wide Range Predicted

Volumes: 100 μ l, 10 μ l

Purification: None

Host: Rabbit

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.

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, SUMOylation and biotinylation; these modifications play a major role in regulating gene expression.

The biotinylation of Histone H3 on Lys4, Lys9 and Lys18 has been reported to be enriched in repeat regions and may participate in repression of transcriptionally competent genes.

Immunogen: This antibody was raised against a synthetic peptide containing biotin-Lys 4 of human Histone H3.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

For Western blotting, this antibody should be incubated overnight at 4°C with 0.5-0.67M NaCl containing PBS with 0.05% Tween 20. For diluting secondary antibodies use a 0.237M NaCl containing PBS with 0.05% Tween 20. In addition, washing steps should be performed with 0.5-0.67M NaCl containing PBS with 0.05% Tween 20.

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.