

Histone H4ac (pan-acetyl) antibody (mAb)

Catalog No: 39967

RRID: AB_2793413

Clone: 3HH4-2C2

Isotype: IgG1, k

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

Reactivity: Human, Wide Range Predicted

Quantity: 100 µg

Purification: Protein A Chromatography

Host: Mouse

Concentration: 1 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.

Lysine N-ε-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in chromatin remodeling and in the regulation of gene expression in various cellular functions. Acetylation of histone H4 occurs at several different lysine positions in the histone tail, and is performed by Histone Acetyltransferases (HATs) such as Hat1 or Gcn5. Acetylation of histones is often associated with transcriptional activation.

Immunogen: This Histone H4 acetyl antibody was raised against a peptide corresponding to amino acids 1- 24 of human histone H4 acetylated at lysines 5, 8, 12 and 16. Due to sequence similarity, cross-reactivity has been observed with acetylated Histone H2A.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

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.