

Histone H3K4me2 (H3K4 Dimethyl) Polyclonal Antibody

(Catalog # A-4032)

Background

Modulation of chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of DNA wound around eight core histone proteins (two each of H2A, H2B, H3, and H4), is the primary building block of chromatin. The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination. These modifications occur in response to various stimuli and have a direct effect on the accessibility of chromatin to transcription factors and, therefore, gene expression. In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20. Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms. Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis. Phosphorylation at Thr3 of histone H3 is highly conserved among many species and is catalyzed by the kinase haspin. Immunostaining with phospho-specific antibodies in mammalian cells reveals mitotic phosphorylation at Thr3 of H3 in prophase and its dephosphorylation during anaphase.

Description

Histone H3K4me2 (H3K4 Dimethyl) Polyclonal Antibody. Unconjugated. Raised in: Rabbit

Formulation

PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.

Purification

Affinity purification

Specificity

Mouse, Rat, Human

Isotype

IgG

Immunogen

A synthetic peptide

Storage

Store at -20°C (regular) or -80°C (long term). Avoid freeze/thaw cycles.

Uniprot ID

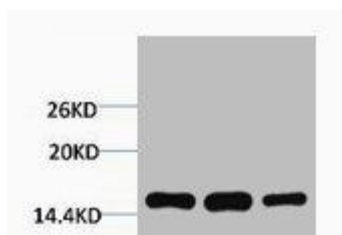
P68431/Q71DI3/P84243

Alternative Names

H3K4me2 antibody; H3K4m2 antibody; HIST1H3J; H3/j; H3FJ; Histone H3.1; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3/f; Histone H3/h; Histone H3/l; Histone H3/j; Histone H3/k; Histone H3/l; HIST3H3

Application

WB; Recommended dilution: WB: 1:1000-2000



Western blot analysis of 1) HeLa, 2) 3T3, 3) Raw264.7, diluted at 1:2000.