



Anti-Histone H3K9me2 Rabbit Polyclonal Antibody

Catalog No.	EM55474-01	EM55474-02
Size	50 μ l	100 μ l

Species reactivity: Human Mouse Rat **Molecular Weight:** 15KD

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 (1). The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination (2-5). 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 (6). In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20 (4,7). 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 (2,3). Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis (8-10). 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 (11)

All Names: 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;HistoneH3/j ;Histone H3/k; Histone H3/l;HIST3H3;

Immunogen: A synthetic methylated peptide corresponding to residues surrounding K9 of human histone H3

Specificity: Histone H3K9me2 Antibody detects endogenous levels of total Histone H3K9me2

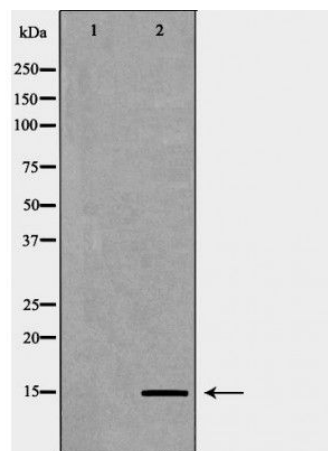
Application: WB 1:1000-1:3000 IHC 1:50-1:200 IF 1:50-1:200 IP 1:50-1:200 CHIP 1:50-1:200

Optimal dilutions/concentrations should be determined by the end user.

Form: Liquid ,1mg/ml

Storage buffer: PBS, pH 7.4, containing 0.02% **sodium azide** as Preservative and 50% Glycerol.

Storage: Store at -20°C. Do not aliquot the antibody.



Western blot analysis of extracts of HeLa cellline and H3 protein expressed in E.coli., using H3K9me2 antibody