Histone H3K27me3 Antibody

Product Code	CSB-PA963638
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	GeneID:8290SwissProt:Q16695
Immunogen	A synthetic methylated peptide corresponding to residues surrounding K27 of Human histone H3
Raised In	Rabbit
Species Reactivity	Human,Mouse,Rat
Tested Applications	ELISA,WB,IHC,IF,IP,ChIP;WB:1:500-1:2000,IHC:1:50-1:200,IF:1:50-1:200,IP:1:50-1:200,ChIP:1:50-1:200

Relevance

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).