
Histone H4K20me3 (H4K20 Trimethyl) Polyclonal Antibody

(Catalog # A-4048)

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).

Description

Histone H4K20me3 (H4K20 Trimethyl) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Specificity

Broad Range, Mouse, Rat, Human

Isotype

IgG

Uniprot ID

P62805

Purification

Affinity Purified

Immunogen

Synthetic Peptide of Human TriMethyl-Histone H4-K20

Storage

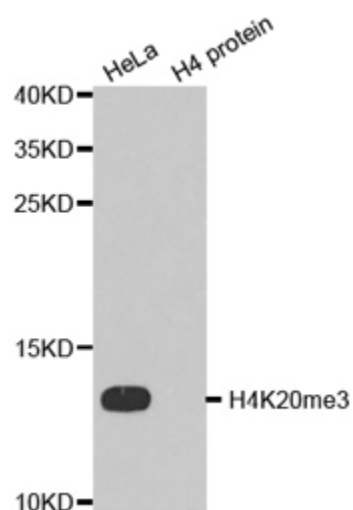
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

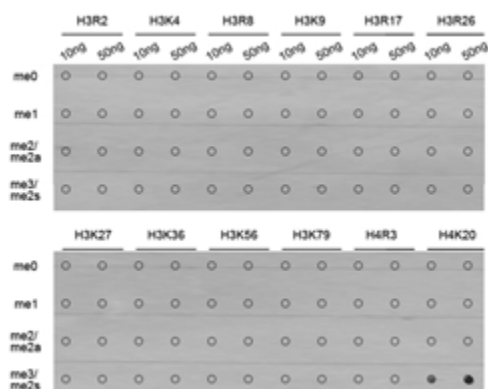
H4K20me3 antibody; H4K20m3 antibody; HIST1H3J; H3/j; H3FJ; Histone H3.1; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3/f; Histone H3/h; Histone H3/l; Histone H3/j; Histone H3/k; Histone H3/l; HIST3H3

Application

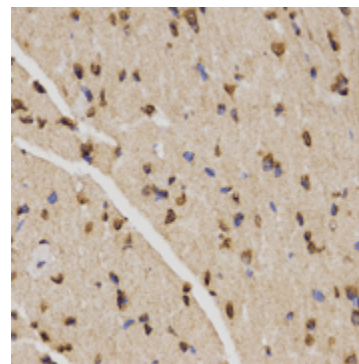
WB, IHC, IF, IP, ChIP, ChIPseq



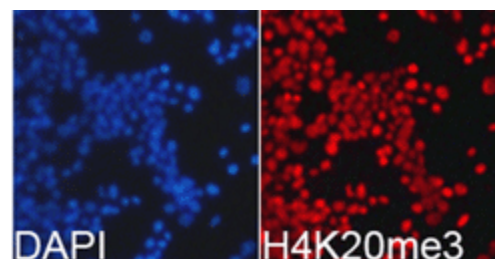
Western blot analysis of extracts of HeLa cell line and H4 protein expressed in E.coli., using H4K20me3 Polyclonal Antibody.



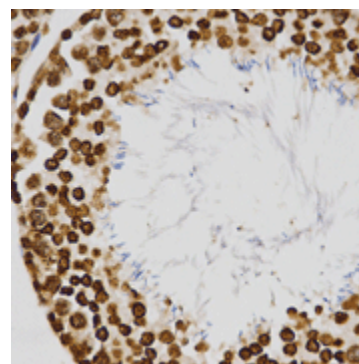
Dot-blot analysis of all sorts of methylation peptides using H4K20me3 Polyclonal Antibody.



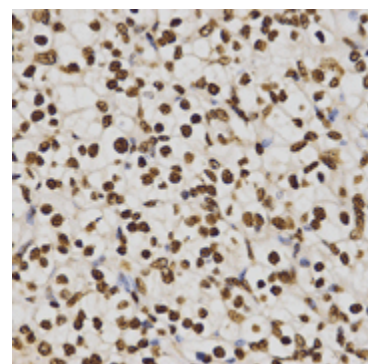
Immunohistochemistry of paraffin-embedded mouse heart tissue using H4K20me3 Polyclonal Antibody at dilution of 1:200 (x400 lens).



Immunofluorescence analysis of 293T cell using H4K20me3 Polyclonal Antibody. Blue: DAPI for nuclear staining.



Immunohistochemistry of paraffin-embedded rat testis tissue using H4K20me3 Polyclonal Antibody at dilution of 1:200 (x400 lens).



Immunohistochemistry of paraffin-embedded human kidney cancer tissue using H4K20me3 antibody at dilution of 1:200 (x400 lens).