

## **Anti-H4K5me1 Antibody**

02/20

CATALOG NO.: A2057-100 (100 µl)

**BACKGROUND DESCRIPTION:** Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack poly A tails but instead contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6.

ALTERNATE NAMES: Histone H4, HIST1H4A; HIST1H4B; HIST1H4C; HIST1H4E; HIST1H4F; HIST1H4H;

HIST1H4I; HIST1H4J; HIST1H4K; HIST1H4L; HIST2H4A; HIST2H4B; HIST4H4, H4/A H4FA; H4/I H4FI; H4/G H4FG; H4/B H4FB; H4/J H4FJ; H4/C H4FC; H4/H H4FH; H4/M H4FM; H4/E H4FE;

H4/D H4FD; H4/K H4FK; H4/N H4F2 H4FN HIST2H4; H4/O H4FO

ANTIBODY TYPE: Polyclonal

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: Methylated peptide sequence targeting residues around Lysine 5 of human Histone H4

PURIFICATION: Antigen Affinity purified

FORM: Liquid

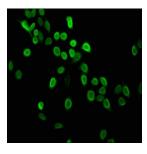
FORMULATION: In 0.01 M PBS, 50% glycerol, 0.03% proclin 300, pH 7.4

SPECIES REACTIVITY: Human

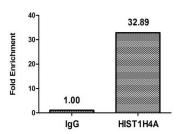
STORAGE CONDITIONS: Store at -20°C. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: IF 1:1-1:10

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user



Immunofluorescence staining of HeLa cells with Anti-H4K5me1 antibody at 1:2.5, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG (H+L) was used as secondary antibody.



ChIP analysis of HeLa cells ( $4x10^6$ ) were treated with Micrococcal Nuclease, sonicated, and immunoprecipitated with 5  $\mu$ g Anti-H4K5me1 antibody or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the  $\beta$ -Globin promoter.

## **RELATED PRODUCTS:**

H4K20me1 monoclonal antibody (6819) H4pan polyclonal antibody (6825) H4K20me3 polyclonal antibody (6877) Anti-H4R3me2(asym) Antibody (A2023)

