

Anti-H4K79ac Antibody

02/20

CATALOG NO.: A2059-100 (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; HIST1H4D; 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: Acetylated peptide sequence targeting residues around Lysine 79 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

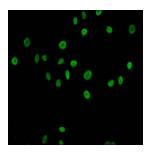
STORAGE CONDITIONS: Store at -20°C. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: ICC 1:10-1:100, IF 1:1-1:10

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



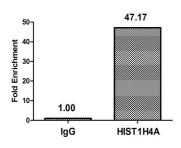
Immunocytochemistry analysis of HeLa cells (treated with 30 mM sodium butyrate for 4 hrs) using Anti-H4K79ac antibody at a dilution of 1:10. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked with 10% normal goat serum 30 min at RT. The primary antibody was incubated at 4°C overnight, detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HeLa cells (treated with 30 mM sodium butyrate for 4 hrs) with Anti-H4K79ac antibody at a dilution of 1:5, and 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 primary 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 (4x10⁶, treated with 30 mM sodium butyrate for 4 hrs) were treated with Benzonase, sonicated, and immunoprecipitated with 5 μg Anti-H4K79ac antibody or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the $\beta\text{-Globin}$ promoter.

RELATED PRODUCTS:

Anti-H4R3me1 Antibody (A2021) Anti- Histone H4 Rabbit Monoclonal Antibody (A1139) H4K8ac polyclonal antibody (6878) H4K5ac polyclonal antibody (6820)

FOR RESEARCH USE ONLY! Not to be used on humans.

