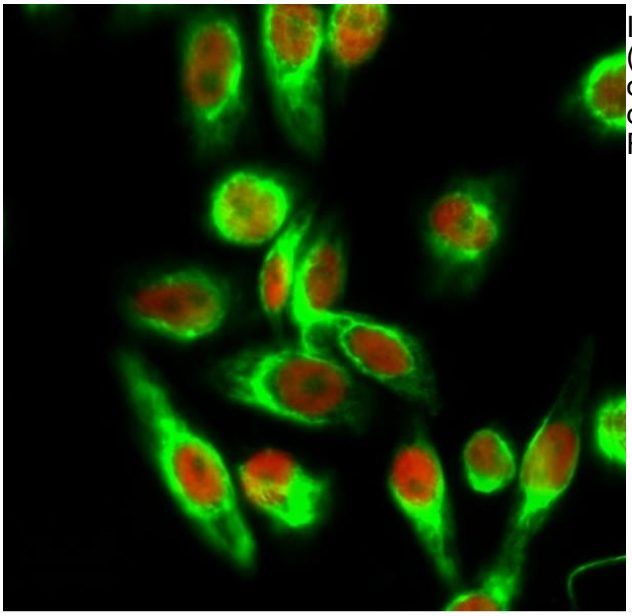
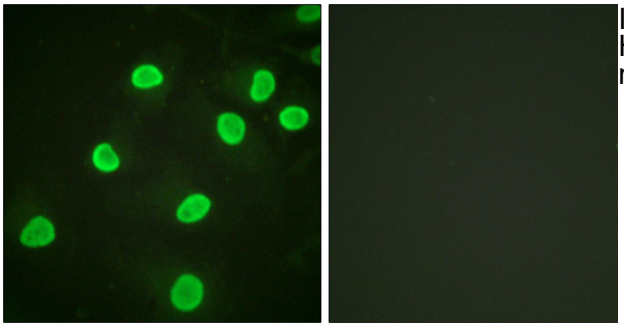
Histone H4 (Acetyl Lys5) Rabbit mAb

Catalog No	YP-rAb-18366
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST2H4A/HIST2H4B/HIST4H4
Protein Name	Histone H4
Purification Process	Protein A
Specificity	Histone H4 (Acetyl Lys5) Monoclonal Antibody detects endogenous levels of Histone H4 protein only when acetylated at K5.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RGkGG
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:500-1:2000; WB 1:10000-1:50000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	HIST1H4A ; H4/A ; H4FA ; HIST1H4B ; H4/I ; H4FI ; HIST1H4C ; H4/G ; H4FG ; HIST1H4D ; H4/B ; H4FB ; HIST1H4E ; H4/J ; H4FJ ; HIST1H4F ; H4/C ; H4FC ; HIST1H4H ; H4/H ; H4FH ; HIST1H4I ; H4/M ; H4FM ; HIST1H4J ; H4/E ; H4FE ; HIST1H4K ; H4/D ; H4FD ; HIST1H4L ; H4/K ; H4FK ; H4K5AC
Observed Band	11kD
Calculated Molecular Weight	11kD
Cell Pathway	Nucleus. Chromosome.
Tissue Specificity	B-cell lymphoma,Bone marrow,Brain,Clones donated by HIP,Corpus call

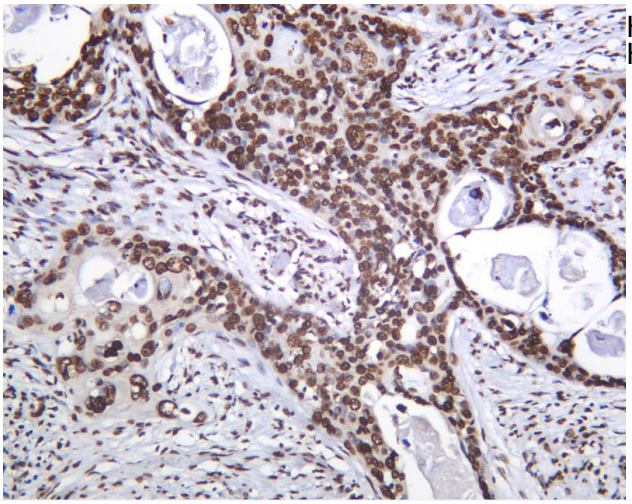
Function	Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.,PTM:Acetylation at Lys-6, Lys-9, Lys-13 and Lys-17 occurs in coding regions of the genome but not in heterochromatin.,PTM:Citrullination at Arg-4 by PADI4 impairs methylation.,PTM:Monomethylated, dimethylated or trimethylated at Lys-21. Monomethylation is performed by SET8. Trimethylation is performed by SUV420H1 and SUV420H2 and induces gene silencing.,PTM:Monomethylation at Arg-4 by PRMT1 favors acetylation at Lys-9 and Lys-13. Demethylation is performed by JMJD6.,PTM:Sumoylated, which is associated with transcriptional repression.,PTM:Ubiquitinated by the CUL4-DDB-RBX1 complex in response to ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA accessibility to repair proteins.,similarity:Belongs to the histone H4 family.,subunit:The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA.,
Background	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 polyA tails but instead contain a palindromic termination element. This gene is found in the histone microcluster on chromosome 6p21.33. [provided by RefSeq, Aug 2015],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



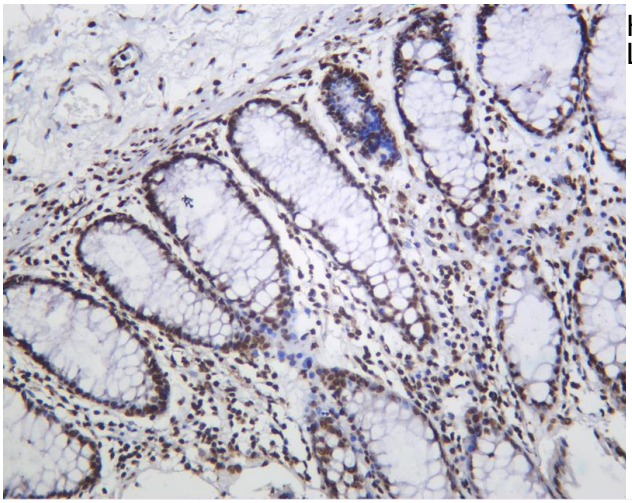
Immunofluorescence analysis of Hela cell. 1,Histone H4 (Acetyl Lys5) Antibody(red) was diluted at 1:200(4° overnight). Bcl-2 Monoclonal Antibody(6B5)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:



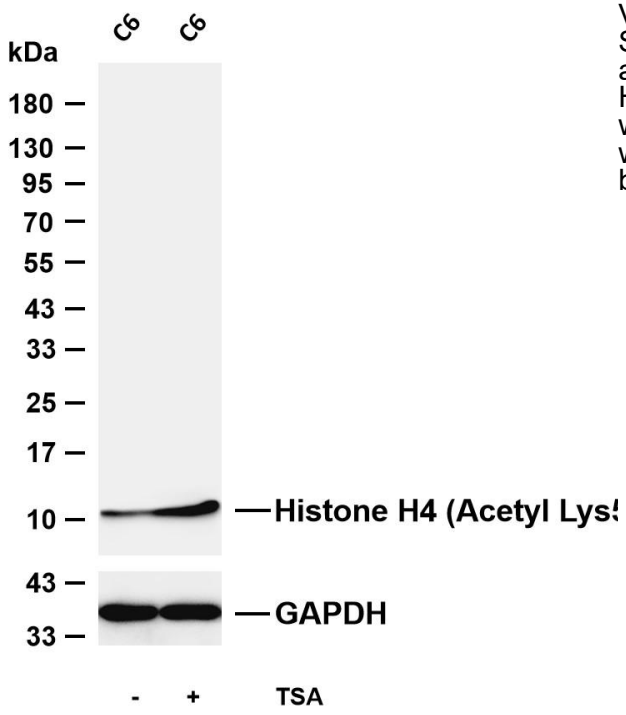
Immunofluorescence analysis of HeLa cells, using Histone H4 (Acetyl-Lys5) Antibody. The picture on the right is blocked with the synthesized peptide.



Human cervical carcinoma was stained with anti-Histone H4 (Acetyl Lys5) Rabbit antibody



Human colon was stained with anti-Histone H4 (Acetyl Lys5) Rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Histone H4 (Acetyl Lys5) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: C6 Lane 2: C6 was treated with TSA(500ng/mL) for 4 hours Predicted band size: 11kDa Observed band size: 11kDa