



Histone H4 Rabbit mAb

Catalog No	YP-rAb-18106
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA,CHIP,Cut&Tag
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	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1000; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; IP 1:50-200; CHIP 1:50-1:100; Cut&Tag 1:50-1:100; 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
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 PAD14 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

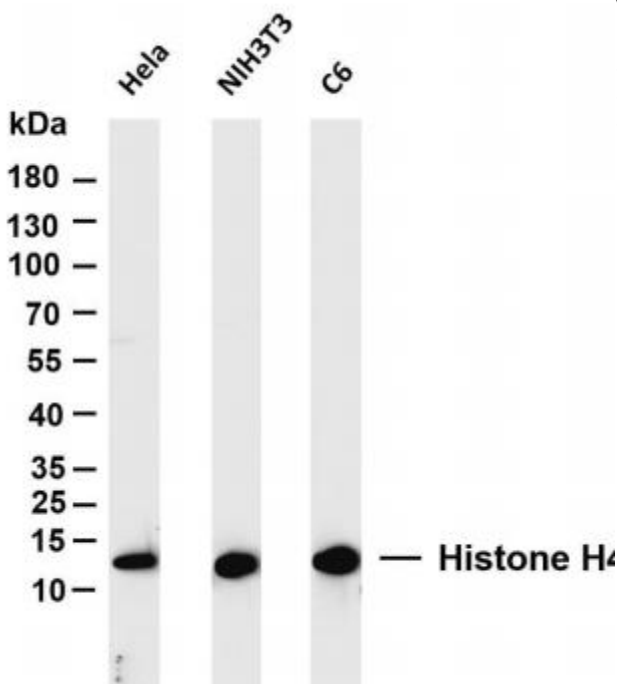
Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. 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

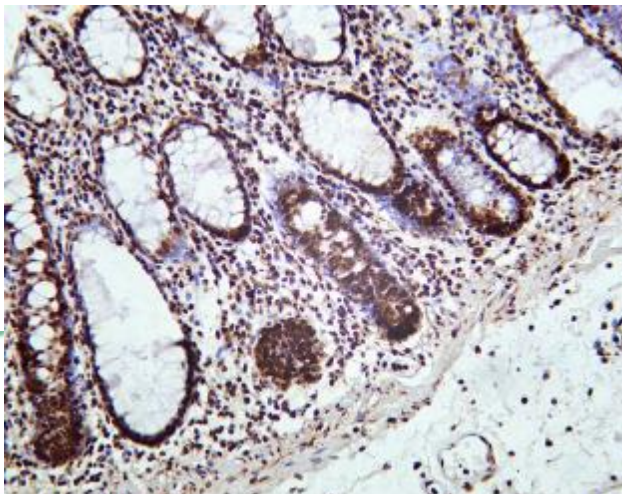
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

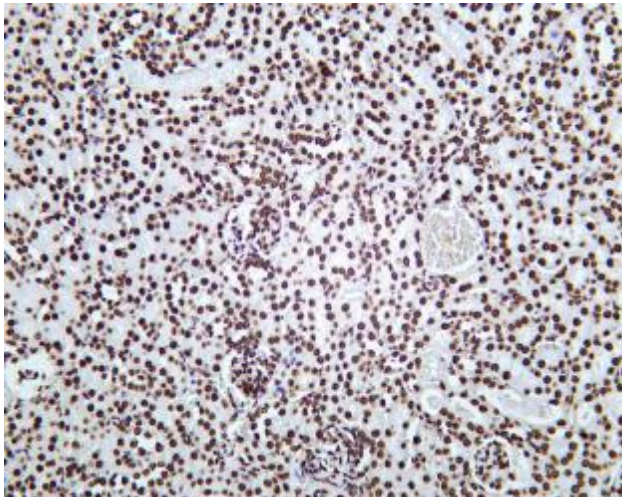


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Histone H4 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: NIH3T3 Lane 3: C6
Predicted band size: 11kDa Observed band size: 11kDa

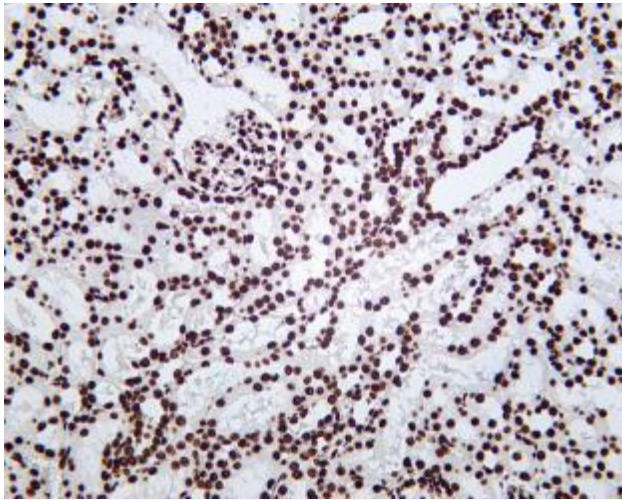


Human colon was stained with Anti-Histone H4 rabbit antibody

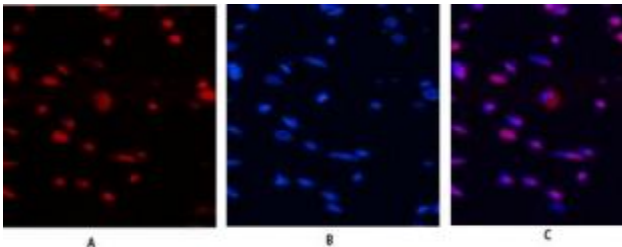




Mouse kidney was stained with Anti-Histone H4 rabbit antibody



Rat kidney was stained with Anti-Histone H4 rabbit antibody



Immunofluorescence analysis of rat-heart tissue.
1, Histone H4 Antibody (red) was diluted at 1:200 (4 ° overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

