



Histone H4 (Acetyl Lys12) Polyclonal Antibody

Catalog No	YP-Ab-00841
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST2H4A/HIST2H4B/HIST4H4
Protein Name	Histone H4
Immunogen	The antiserum was produced against synthesized peptide derived from human Histone H4 around the acetylated site of Lys12. AA range:10-59
Specificity	Acetyl-Histone H4 (K12) Polyclonal Antibody detects endogenous levels of Histone H4 protein only when acetylated at K12.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
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;H4K12AC
Observed Band	11kD
Cell Pathway	Nucleus. Chromosome.
Tissue Specificity	B-cell lymphoma,Bone marrow,Brain,Clones donated by HIP,Corpus call
Function	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 p

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

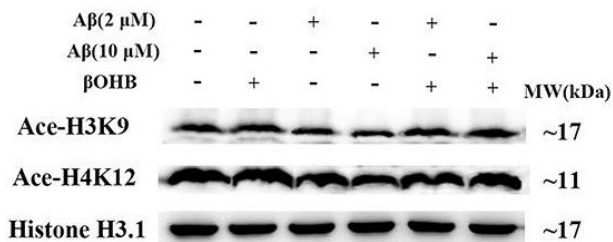
Avoid repeated freezing and thawing!

Usage suggestions

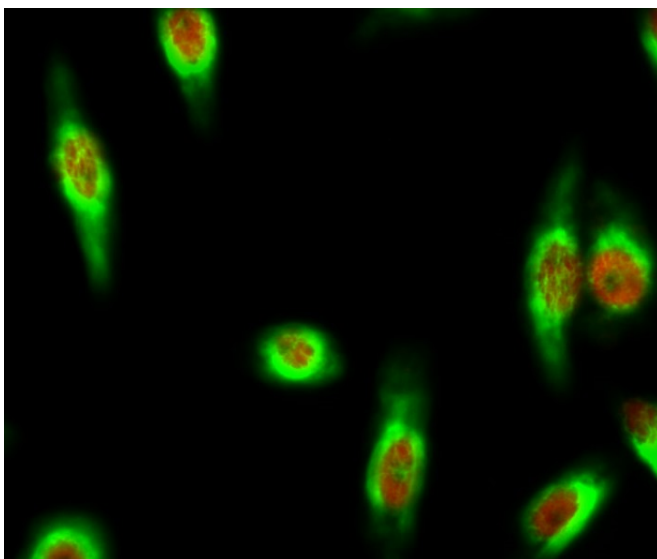
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



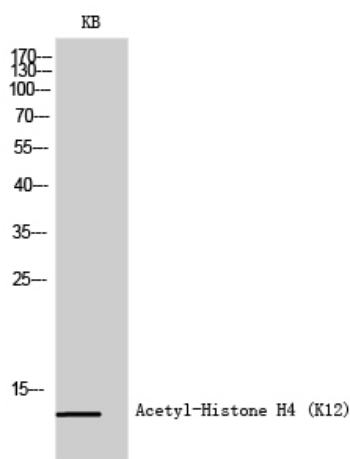
Products Images



Zhang, Jingzhu, et al. "Intermittent Fasting Alleviates the Increase of Lipoprotein Lipase Expression in Brain of a Mouse Model of Alzheimer's Disease: Possibly Mediated by β-hydroxybutyrate." *Frontiers in cellular neuroscience* 12 (2018): 1.



Immunofluorescence analysis of HeLa cell. 1, Histone H4 (Acetyl Lys12) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). β-Tubulin Monoclonal Antibody (5G3) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



Western Blot analysis of KB cells using Acetyl-Histone H4 (K12) Polyclonal Antibody diluted at 1:500. Secondary antibody (catalog#: RS0002) was diluted at 1:20000.



170— 293 293

130—

100—

70—

55—

40—

35—

25—

15—

Histone H4 (Acetyl-Lys12)
+ - TSA 400nM 24h

Western Blot analysis of 293 cells using Acetyl-Histone H4 (K12) Polyclonal Antibody diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000

Mouse-kidney HELA

170—

130—

100—

70—

55—

40—

35—

25—

15—

Acetyl-
Histone H4 (K12)

Western blot analysis of Mouse-kidney HELA lysis using Acetyl-Histone H4 (K12) antibody. Antibody was diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000