Product Name: Histone H4 (Acetyl Lys12) Rabbit Polyclonal Antibody
Catalog #: APRab06212

Summary

Production Name	Histone H4 (Acetyl Lys12) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse,Rat,Monkey

Performance

Conjugation	Unconjugated
Modification	Acetyl Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/ HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST2H4A/HIST2H4B/HIST4H4
Alternative Names	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
Gene ID	121504/554313/8294/8359/8360/8361/8362/8363/8364/8365/8366/8367/8368/8370
SwissProt ID	P62805.The antiserum was produced against synthesized peptide derived from human Histone H4 around the acetylated site of Lys12. AA range:10-59

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Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Molecular Weight	11kD

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],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.,

Research Area

Protein_Acetylation

Image Data

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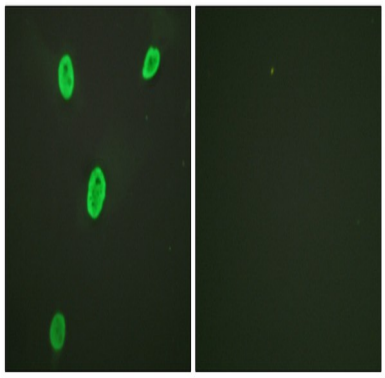
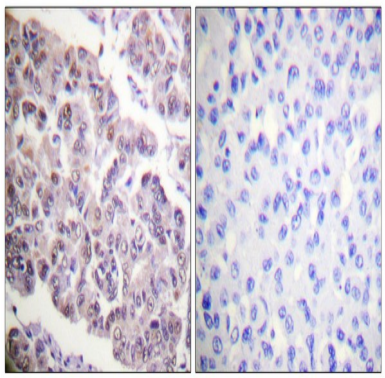
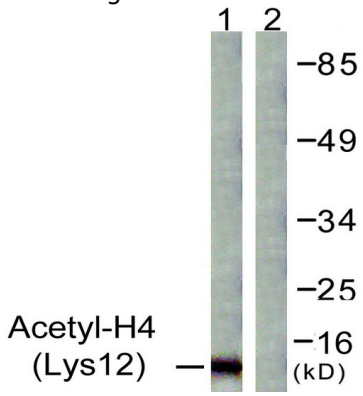


Immunofluorescence analysis of HeLa cells, using Histone H4 (Acetyl-Lys12) Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Histone H4 (Acetyl-Lys12) Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COS7 cells, treated with TSA 400nM 24h, using Histone H4 (Acetyl-Lys12) Antibody. The lane on the right is blocked with the synthesized peptide.

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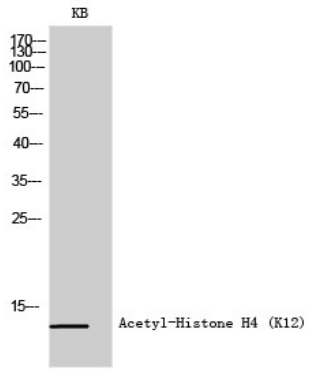
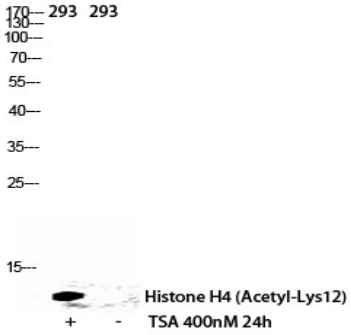
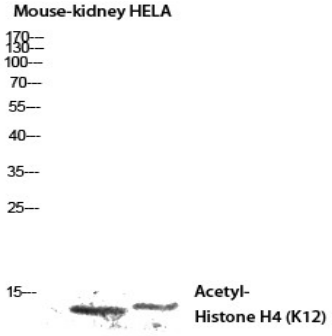


Western Blot analysis of KB cells using Acetyl-Histone H4 （K12） Polyclonal Antibody diluted at 1：500. Secondary antibody was diluted at 1:20000



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



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

Note

For research use only.