

Product Name: Mono-Methyl-Histone H4 (K21) Rabbit Polyclonal Antibody
Catalog #: APRab04155



Summary

Production Name	Mono-Methyl-Histone H4 (K21) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Methyl 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 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; HIST2H4A H4/N H4F2 H4FN HIST2H4; HIST2H4B H4/O H4FO; HIST4H4 H4K21ME1; 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; HIST2H4A; H4/N; H4F2; H4FN; HIST2H4; HIST2H4B; H4/O; H4FO; HIST4H4; Histone H4
Alternative Names	
Gene ID	121504.0
SwissProt ID	P62805.Synthetic Mono-Methyl peptide from human protein at AA range: 21

Application

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Dilution Ratio WB 1:500-2000, ELISA 1:10000-20000

Molecular Weight 11kD

Background

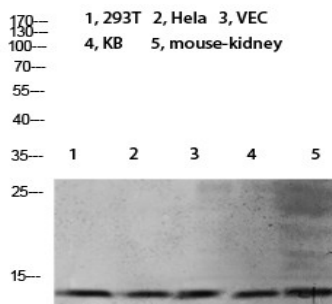
Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes.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

Systemic lupus erythematosus;

Image Data

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Western blot analysis of 3T3 mouse-kidney KB K562 HeLa 293T lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000

Note

For research use only.