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Histone H4 (ANT0051R) Rabbit mAb

CatalogNo: ANT8088 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IHC, IF, IP, ELISA

MW Isotype

• 11kD (Calculated) • IgG,Kappa

11kD (Observed)

Recommended Dilution Ratios

IHC 1:200-1000 WB 1:1000-5000 IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0051R

Target Information

Immunogen Information Specificity

Endogenous

Gene name

HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4I/HIST1H4I/HIST1H4I/HIST1H4I/HIST1H4L/HIST2H4A/HIST2H4B/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/HIST2HAB/H

Protein Name

HISTOILE H4

Organism	Gene ID	UniProt ID
Human	121504; 554313; 8294; 8359; 8360; 8361; 8362; 8363; 8364; 8365; 8366; 8367; 8368; 8370;	<u>P62805</u> ;
Mouse	100041230;	<u>P62806</u> ;
Rat	<u>100360950</u> ;	<u>P62804</u> ;

Cellular Localization Nuclear

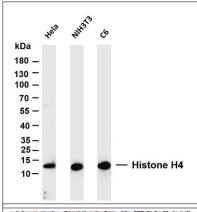
Tissue specificity B-cell lymphoma, Bone marrow, Brain, Clones donated by HIP, Corpus call

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.,ANTM: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

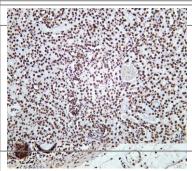
proteins.,similarity:Belongs to the histone H4 family.,subunit:The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA.,

Validation Data

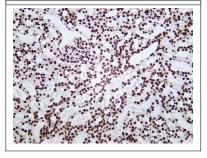


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Histone H4 (ANT0051R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H+L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: NIH3T3 Lane 3: C6 Predicted band size: 11kDa

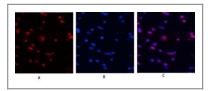
Observed band size: 11kDa



Human colon was stained with Anti-Histone H4 (ANT0051R) rabbit antibody Mouse kidney was stained with Anti-Histone H4 (ANT0051R) rabbit antibody



Rat kidney was stained with Anti-Histone H4 (ANT0051R) rabbit antibody



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

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