Histone H4 (Acetyl Lys16) (PT0985R) PT™ Rabbit mAb

CatalogNo: YM8775 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,IP,ELISA,CHIP,Cut&Tag

MW
- 11kD
(Calculated)
11kD (Observed)

Isotype
- IgG,Kappa

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Recommended Dilution Ratios

IHC 1:200-1:1000
WB 1:2000-1:10000
IF 1:200-1:1000
ELISA 1:5000-1:20000
IP 1:50-1:200
CHIP 1:50-1:100
Cut&Tag 1:50-1:100

Basic Information

Clonality	Monoclonal
Clone Number	PT0985R

Immunogen Information

Immunogen	The specific immunogen used to produce this antibody is proprietary information.

Specificity Histone H4 (Acetyl Lys16) Monoclonal Antibody detects endogenous levels of Histone H4 protein only when acetylated at Lys16.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):GGaKR

Target Information

Gene name HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST2H4A/HIST2H4B/HIST4H4

Protein Name Histone H4

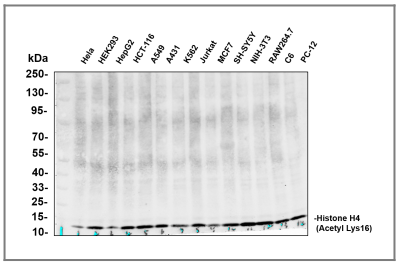
Organism	Gene ID	UniProt ID
Human	121504; 554313; 8294; 8359; 8360; 8361; 8362; 8363; 8364; 8365; 8366; 8367; 8368; 8370;	P62805;
Mouse	100041230;	P62806;
Rat	100360950;	P62804;

Cellular Localization Nucleus. Chromosome.

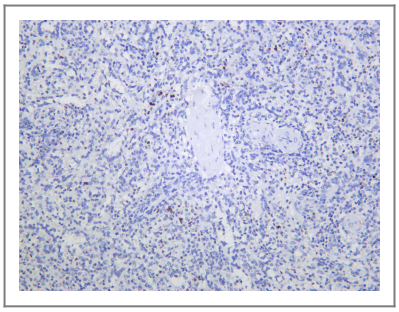
Tissue specificity B-cell lymphoma,Bone marrow,Brain,Clones donated by HIP,Corpus call

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 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.,

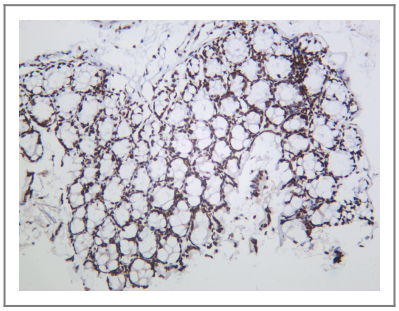
Validation Data



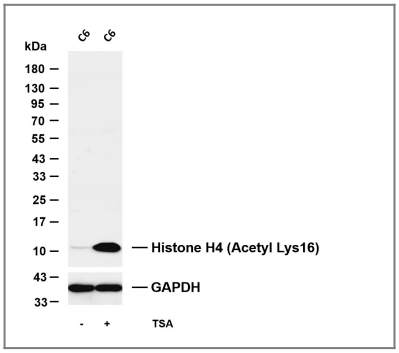
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4℃ over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody (Cat:RS23920) was used to detect the antibody. Lane1: Hela - Human cervical cancer Lane2: HEK293 - Human normal embryonic kidney Lane3: HepG2 - Human hepatocellular carcinoma Lane4: HCT-116 - Human colon cancer Lane5: A549 - Human lung adenocarcinoma Lane6: A431 - Human skin squamous cell carcinoma Lane7: K562 - Human chronic myeloid leukemia Lane8: Jurkat - Human acute T cell leukemia cells Lane9: MCF7 - Human breast cancer Lane10: SH-SY5Y - Human neuroblastoma cells Lane11: NIH-3T3 - NIH mouse fibroblasts Lane12: RAW264.7 - Mouse mononuclear macrophage leukemia cells Lane13: C6 - Rat glioma cells Lane14: PC-12 - Pheochromocytoma in rats Predicted band size: 11kDa Observed band size: 11kDa



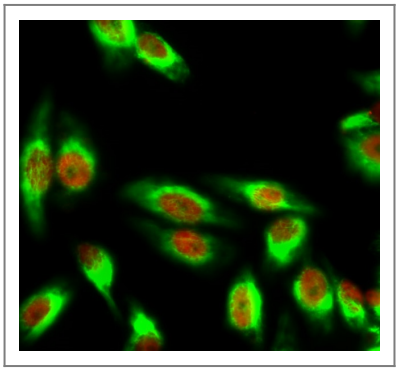
Human spleen was stained with anti-Histone H4 (Acetyl Lys16) (PT0985R) Rabbit antibody



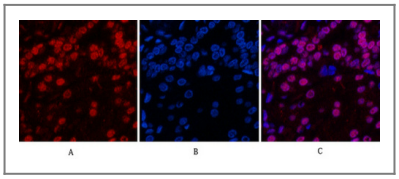
Mouse colon was stained with anti-Histone H4 (Acetyl Lys16) (PT0985R) Rabbit antibody



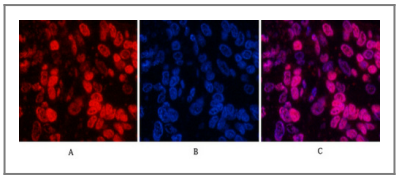
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Histone H4 (Acetyl Lys16) (PT0985R) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: C6 Lane 2: C6 was treated with TSA (500ng/mL) for 4 hours Predicted band size: 11kDa Observed band size: 11kDa



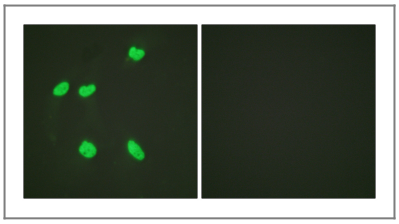
Immunofluorescence analysis of Hela cell. 1,mouse Tubulin Antibody YM3035 (green) was diluted at 1:200 (4℃ overnight). Histone H4 (Acetyl Lys16) (PT0985R) Rabbit mAb (red) was diluted at 1:200 (4℃ overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).



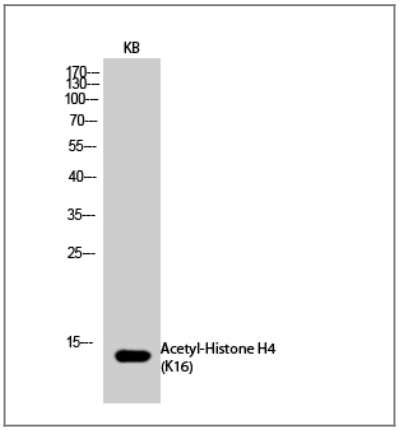
Immunofluorescence analysis of Human-kidney tissue. 1,Histone H4 (Acetyl Lys16) Antibody (red) was diluted at 1:200 (4℃ overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min).3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Human-lung-cancer tissue. 1,Histone H4 (Acetyl Lys16) 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



Immunofluorescence analysis of HeLa cells, using Histone H4 (Acetyl-Lys16) Antibody. The picture on the right is blocked with the synthesized peptide.



Western Blot analysis of KB cells using Acetyl-Histone H4 (K16) Antibody. Secondary antibody (catalog#:RS0002) was diluted at 1:20000

Contact information

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Please scan the QR code to access additional product information:
Histone H4 (Acetyl Lys16) (PT0985R) PT™ Rabbit mAb