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Histone H4 (acetyl K16) Recombinant Rabbit mAb

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Catalog # AP94221

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC
Host	Rabbit
Clonality	Recombinant
Calculated MW	11 KDa
Physical State	Liquid
Immunogen	Recombinant protein
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus. Chromosome.
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.
Post-translational modifications	Acetylation at Lys-6 (H4K5ac), Lys-9 (H4K8ac), Lys-13 (H4K12ac) and Lys-17 (H4K16ac) occurs in coding regions of the genome but not in heterochromatin. Citrullination at Arg-4 (H4R3ci) by PADI4 impairs methylation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a member of the histone H4 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. [provided by RefSeq, Jul 2008]

Additional Information

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:400-800,ICC/IF=1:200,IF=1:100-500
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Background

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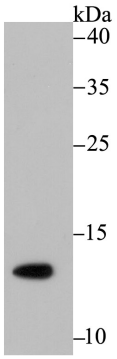
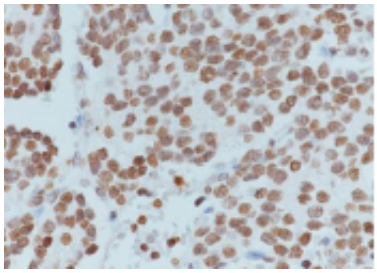
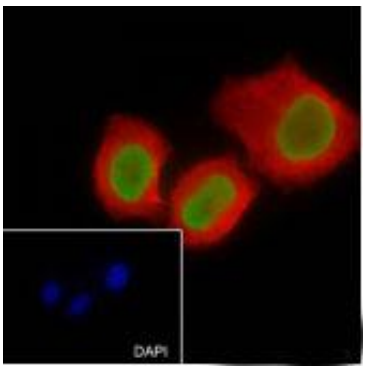
Images



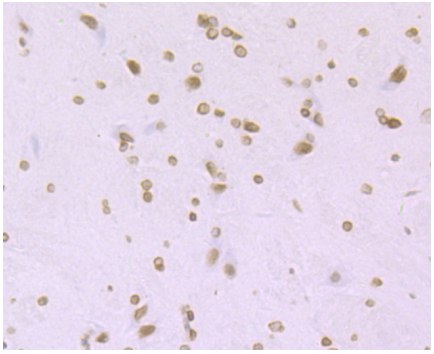
Western blot analysis of Histone H4 (acetyl K16) on SiHa cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (AP94221, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody at 1:200,000 dilution was used for 1 hour at room temperature.



Tissue: Human neuroblastoma Section type: Formalin fixed & Paraffin-embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:200 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) HRP (Ready to use) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94221

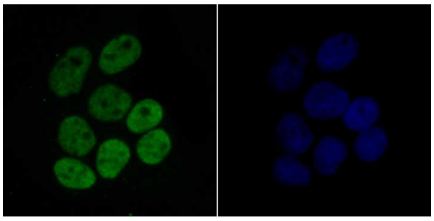


Cell line: HeLa Fixative: 4% Paraformaldehyde Permeabilization: 0.1% TritonX-100 Primary ab dilution: 1:200 Primary incubation condition: 4°C overnight Secondary ab: Goat Anti-Rabbit IgG Nuclear counter stain: DAPI (Blue) Counter stain: Tubulin (Red) Comment: Color green is the positive signal for AP94221

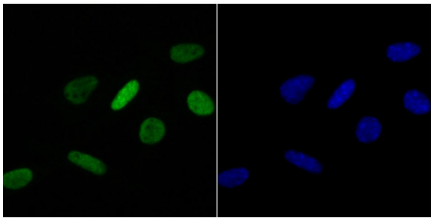


Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-Histone H4 (acetyl K16) antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (AP94221, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

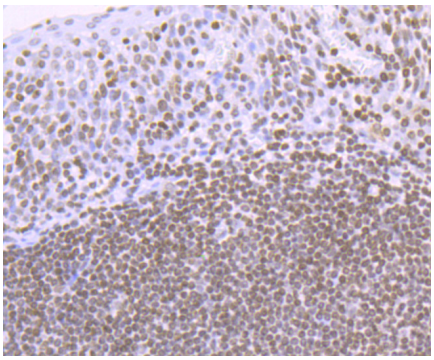
ICC staining of Histone H4 (acetyl K16) in Hela cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15



minutes at room temperature. Cells were probed with the primary antibody (AP94221, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



ICC staining of Histone H4 (acetyl K16) in SH-SY5Y cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (AP94221, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Histone H4 (acetyl K16) antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (AP94221, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.