



Histone H3 (Acetyl Lys9) Polyclonal Antibody

Catalog No	YP-Ab-00834
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H3F3B
Protein Name	Histone H3.1/Histone H3.2/Histone H3.3
Immunogen	The antiserum was produced against synthesized peptide derived from human Histone H3 around the acetylated site of Lys9. AA range:3-52
Specificity	Acetyl-Histone H3 (K9) Polyclonal Antibody detects endogenous levels of Histone H3 protein only when acetylated at K9.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000, IHC-p 1:50-300, IF 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HIST1H3A; H3FA; HIST1H3B; H3FL; HIST1H3C; H3FC; HIST1H3D; H3FB; HIST1H3E; H3FD; HIST1H3F; H3FI; HIST1H3G; H3FH; HIST1H3H; H3FK; HIST1H3I; H3FF; HIST1H3J; H3FJ; Histone H3.1; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3;H3k9AC
Observed Band	17kD
Cell Pathway	Nucleus. Chromosome.
Tissue Specificity	Blood,Epithelium,Kidney,Lung,Ovary,Spleen,Uterus,
Function	caution:Was originally (PubMed:2587222) thought to originate from mouse.,developmental stage:Expressed during S phase, then expression strongly decreases as cell division slows down during the process of differentiation.,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.,mass spectrometry:Monoisotopic with N-acetylserine



PubMed:16457589,miscellaneous:This histone is only present in mammals and is enriched in acetylation of Lys-15 and dimethylation of Lys-10 (H3K9me2).,PTM:Acetylation is generally I

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 replication-dependent histone that is a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015],

matters needing attention

Avoid repeated freezing and thawing!

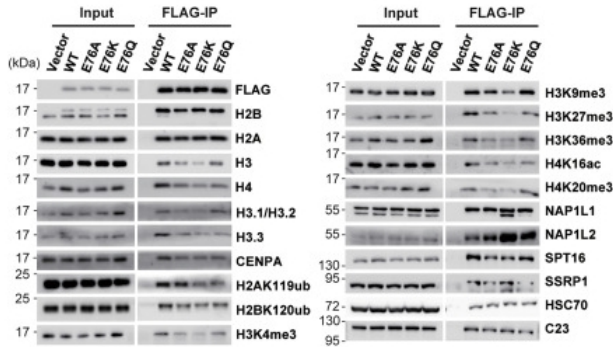
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

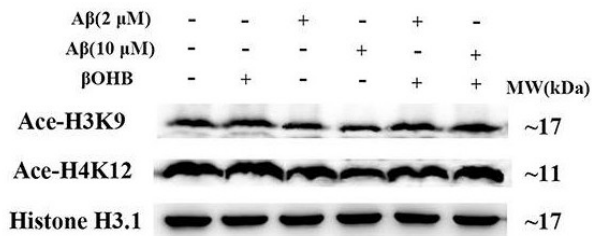


Products Images

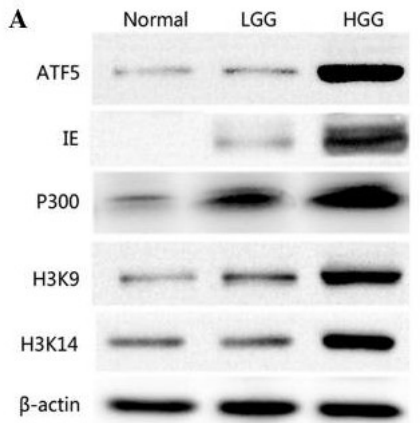
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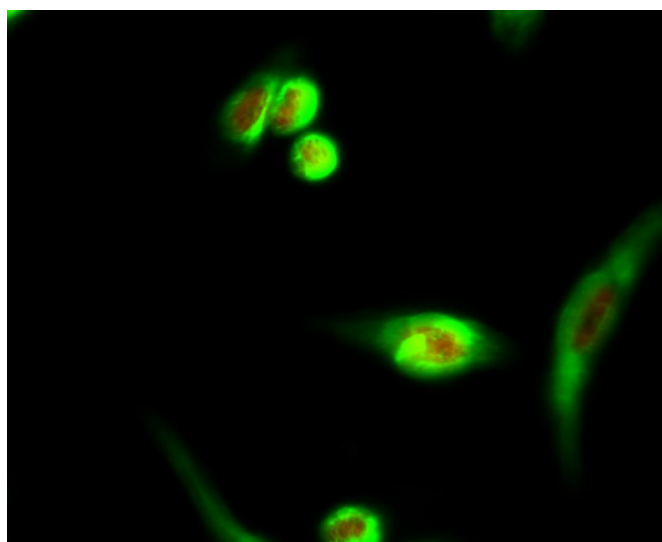
Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." *Journal of Biological Chemistry* 296 (2021).



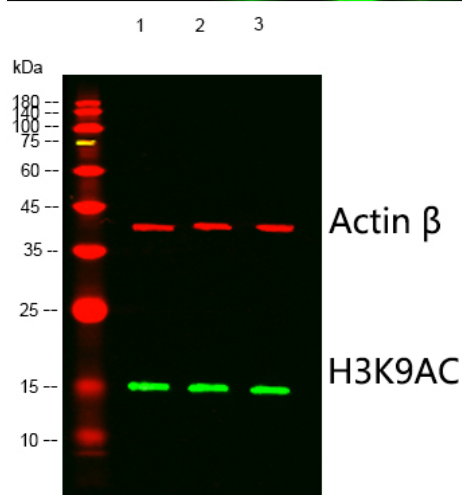
Zhang, Jingzhu, et al. "Intermittent Fasting Alleviates the Increase of Lipoprotein Lipase Expression in Brain of a Mouse Model of Alzheimer's Disease: Possibly Mediated by β-hydroxybutyrate." *Frontiers in cellular neuroscience* 12 (2018): 1.



Huang, Rui, et al. "Association between human cytomegalovirus infection and histone acetylation level in various histological types of glioma." *Oncology letters* 10.5 (2015): 2812-2820.



Immunofluorescence analysis of HeLa cell. 1, Histone H3 (Acetyl Lys9) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). MICU1 Monoclonal Antibody (green) 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).



Western blot analysis of lysates from 1) HeLa, 2) MCF-7, 3) 3T3 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody (Immunoway: RS23920) was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody (5B7) (Immunoway: YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody (Immunoway: RS23710) was diluted at 1:10000, 37° 1hour.