

## Histone H3 (Acetyl Lys9) Polyclonal Antibody

Catalog No: YK0006

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Histone H3

**Fields:** >>Neutrophil extracellular trap

formation;>>Alcoholism;>>Shigellosis;>>Transcriptional misregulation in

cancer;>>Systemic lupus erythematosus

Gene Name: HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3

G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H

3F3B

**Protein Name:** Histone H3.1/Histone H3.2/Histone H3.3

Human Gene Id: 8350/8351/8352/8353/8354/8355/8356/8357/8358/8968/126961/333932/6536

04/3020/3021

**Human Swiss Prot** 

No:

P68431/Q71DI3/P84243

Mouse Gene ld: 319152/15077/15078

**Rat Gene Id:** 291159/100361558

Rat Swiss Prot No: Q6LED0/P84245

**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, lgG



**Dilution :** WB 1:500-2000, IHC 1:50-300, IF 1:50-300

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 17kD

**Cell Pathway :** Protein\_Acetylation

**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],

**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

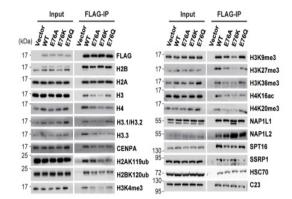
Subcellular Location:

Nucleus. Chromosome.

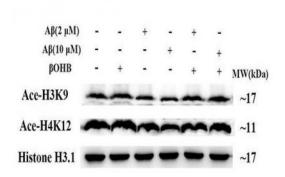
**Expression:** Blood, Epithelium, Kidney, Lung, Ovary, Spleen, Uterus,

## **Products Images**

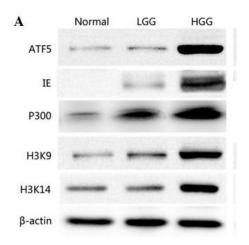
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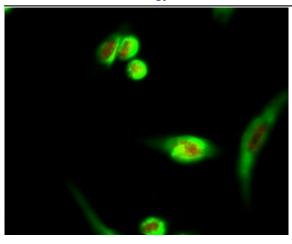
Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." Journal of Biological Chemistry 296 (2021).



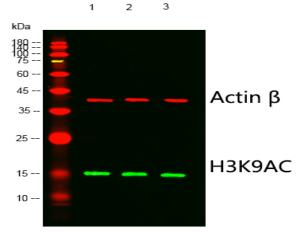
Zhang, Jingzhu, et al. "Intermittent Fasting Alleviates the Increase of Lipoprotein Lipase Expression in Brain of a Mouse Model of Alzheimer's Disease: Possibly Mediated by  $\beta$ -hydroxybutyrate." Frontiers in cellular neuroscience 12 (2018): 1.



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(Mix)(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).



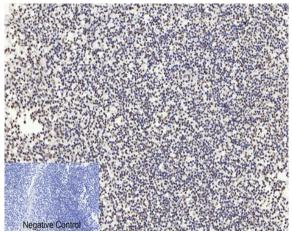
Western blot analysis of lysates from 1) Hela ,2) MCF-7,3) 3T3 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Actin  $\beta$  Monoclonal Antibody(5B7) (Immunoway:YM3028) antibody was diluted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



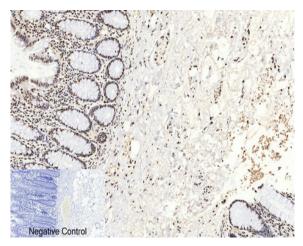
Immunohistochemical analysis of paraffin-embedded Humanuterus tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



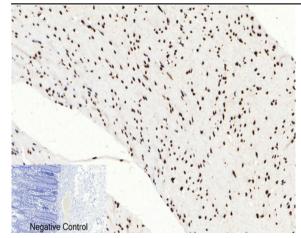
Immunohistochemical analysis of paraffin-embedded Humanuterus-cancer tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



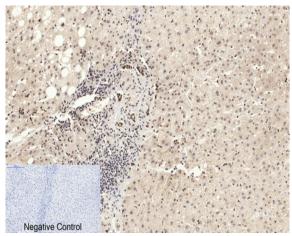
Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



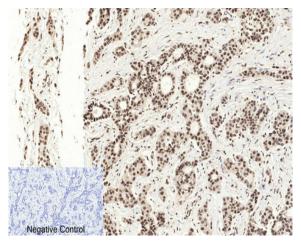
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



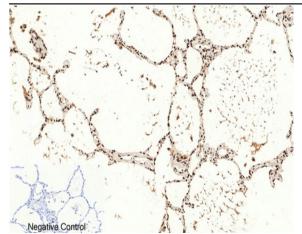
Immunohistochemical analysis of paraffin-embedded Human-colon-cancer tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



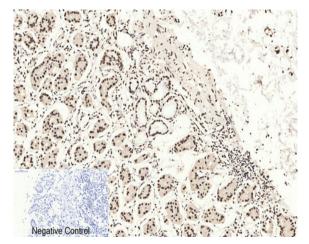
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



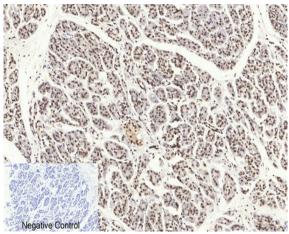
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



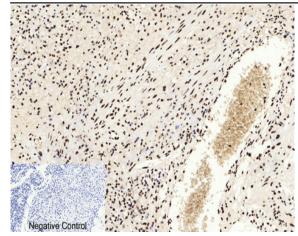
Immunohistochemical analysis of paraffin-embedded Humanlung tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Humanstomach tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



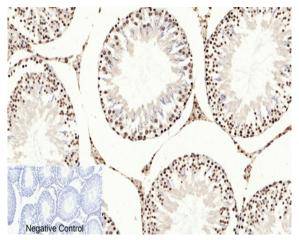
Immunohistochemical analysis of paraffin-embedded Humanstomach-cancer tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



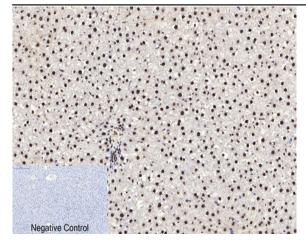
Immunohistochemical analysis of paraffin-embedded Human-Appendix tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



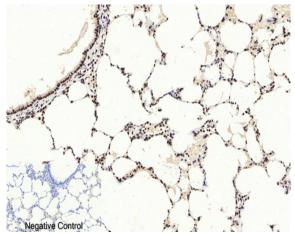
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



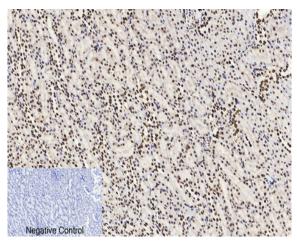
Immunohistochemical analysis of paraffin-embedded Rat-testis tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



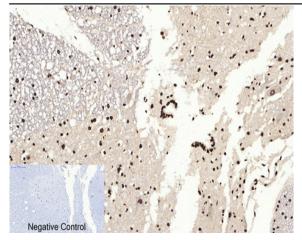
Immunohistochemical analysis of paraffin-embedded Rat-liver tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



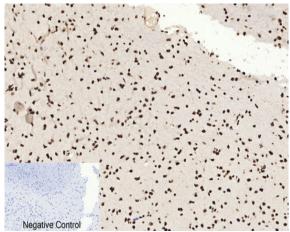
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



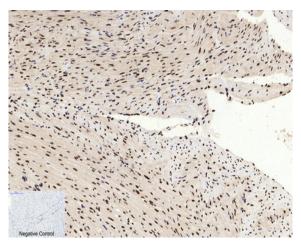
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



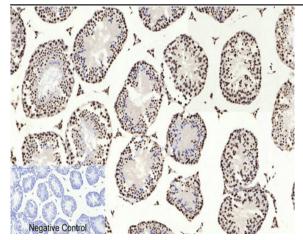
Immunohistochemical analysis of paraffin-embedded Rat-spinal-cord tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



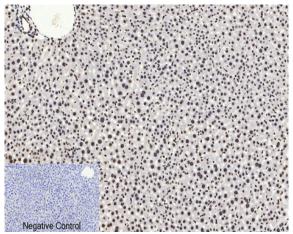
Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



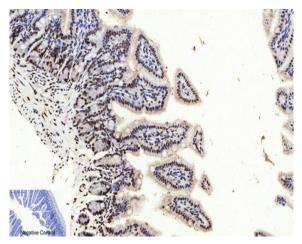
Immunohistochemical analysis of paraffin-embedded Mouseheart tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



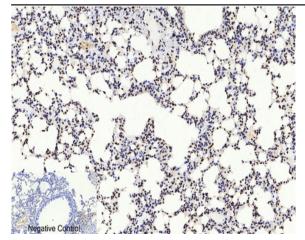
Immunohistochemical analysis of paraffin-embedded Mouse-testis tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



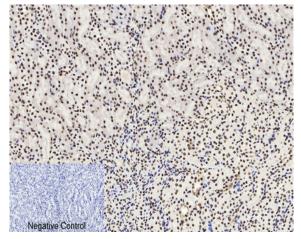
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



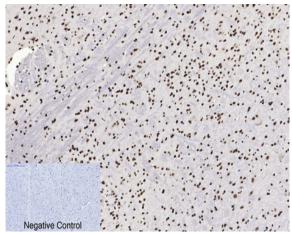
Immunohistochemical analysis of paraffin-embedded Mouse-colon tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



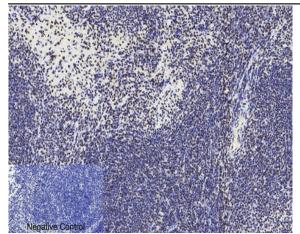
Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



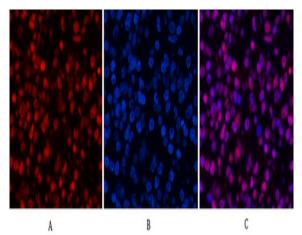
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



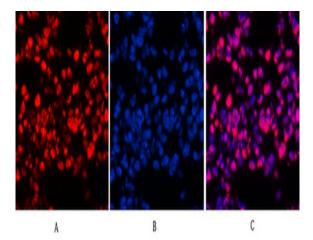
Immunohistochemical analysis of paraffin-embedded Mousebrain tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



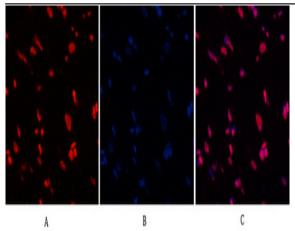
Immunohistochemical analysis of paraffin-embedded Mouse-spleen tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



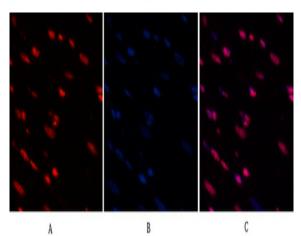
Immunofluorescence analysis of Human-lung-cancer tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



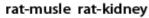
Immunofluorescence analysis of Mouse-lung tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

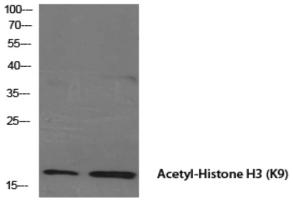


Immunofluorescence analysis of Rat-heart tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

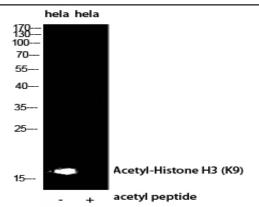


Immunofluorescence analysis of Rat-heart tissue. 1,Histone H3 (Acetyl Lys9) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B





Western Blot analysis of various cells using Acetyl-Histone H3 (K9) Polyclonal Antibody diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western Blot analysis of hela using Acetyl-Histone H3 (K9) Polyclonal Antibody. Antibody was diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of 293T mouse-spleen lysis using Acetyl-Histone H3 (K9) antibody. Antibody was diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000