



## Rabbit Anti-Histone H3 (acetyl K27) antibody

SL7451R

<b>Product Name:</b>	Histone H3 (acetyl K27)
<b>Chinese Name:</b>	乙酰化组蛋白H3抗体
<b>Alias:</b>	acetyl H3; Histone H3(acetyl k27); H3K27; H 3; H3 3 Like Sequence MH921; H3 3A; H3; H3 Histone; H3 Histone Family Member E Pseudogene; H3.4; H3/A; H3/g; H31_HUMAN; H3F3; H3FA; H3FT; H3t; HIST1H3J; HIST3H3; Histone cluster 1, H3a; Histone H3 3 Pseudogene; Histone H3.1; Histone H3.3; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3/f; Histone H3/h; Histone H3/i; Histone H3/j; Histone H3/k; Histone H3/l;
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	15kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised acetylpeptide derived from human Histone H3 around the acetylation site of K27:AR(Ac-K)SA
<b>Isotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>

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 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, Jul 2008]

**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.

**Subcellular Location:**

Nucleus. Chromosome.

**Post-translational modifications:**

Acetylation is generally linked to gene activation. Acetylation on Lys-10 (H3K9ac) impairs methylation at Arg-9 (H3R8me2s). Acetylation on Lys-19 (H3K18ac) and Lys-24 (H3K24ac) favors methylation at Arg-18 (H3R17me). Citrullination at Arg-9 (H3R8ci) and/or Arg-18 (H3R17ci) by PADI4 impairs methylation and represses transcription.

**DISEASE:**

Expressed during S phase, then expression strongly decreases as cell division slows down during the process of differentiation.

**Similarity:**

Belongs to the histone H3 family.

**SWISS:**

P68431

**Gene ID:**

8290

**Database links:**

[Entrez Gene: 8290](#)Human

**Product Detail:**

[Entrez Gene: 8350](#)Human  
[Entrez Gene: 8351](#)Human  
[Entrez Gene: 8352](#)Human  
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[Entrez Gene: 360198](#)Mouse  
[Entrez Gene: 97908](#)Mouse  
[Entrez Gene: 100364501](#)Rat  
[Entrez Gene: 100365669](#)Rat  
[Entrez Gene: 291159](#)Rat  
[Entrez Gene: 314977](#)Rat  
[Entrez Gene: 364716](#)Rat  
[Entrez Gene: 679950](#)Rat

[Entrez Gene: 679994](#)Rat

[Entrez Gene: 680511](#)Rat

[Entrez Gene: 680599](#)Rat

[Entrez Gene: 682330](#)Rat

[Entrez Gene: 691496](#)Rat

[Omim: 601128](#)Human

[Omim: 602810](#)Human

[Omim: 602811](#)Human

[Omim: 602812](#)Human

[Omim: 602813](#)Human

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[Omim: 602817](#)Human

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[Omim: 602819](#)Human

[SwissProt: P68431](#)Human

[SwissProt: P84243](#)Human

[SwissProt: Q16695](#)Human

[SwissProt: Q6NXT2](#)Human

[SwissProt: Q71DI3](#)Human

[SwissProt: P68433](#)Mouse

[SwissProt: P84228](#)Mouse

[SwissProt: Q6LED0](#)Rat

[Unigene: 132854](#)Human

[Unigene: 247813](#)Human

[Unigene: 247814](#)Human

[Unigene: 248176](#)Human

[Unigene: 443021](#)Human

[Unigene: 484990](#)Human

[Unigene: 532144](#)Human

[Unigene: 533292](#)Human

[Unigene: 546315](#)Human

[Unigene: 586261](#)Human

[Unigene: 591778](#)Human

[Unigene: 221301](#)Mouse

[Unigene: 261657](#)Mouse

[Unigene: 377874](#)Mouse

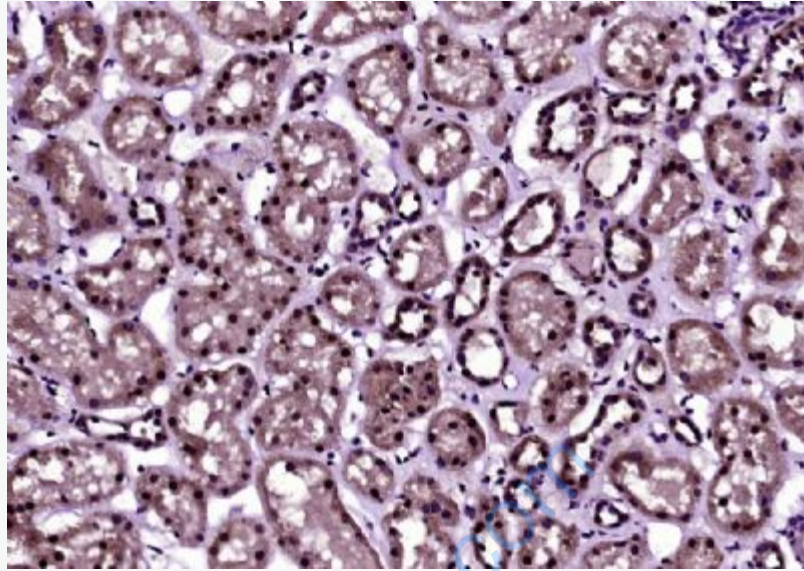
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[Unigene: 397328](#)Mouse

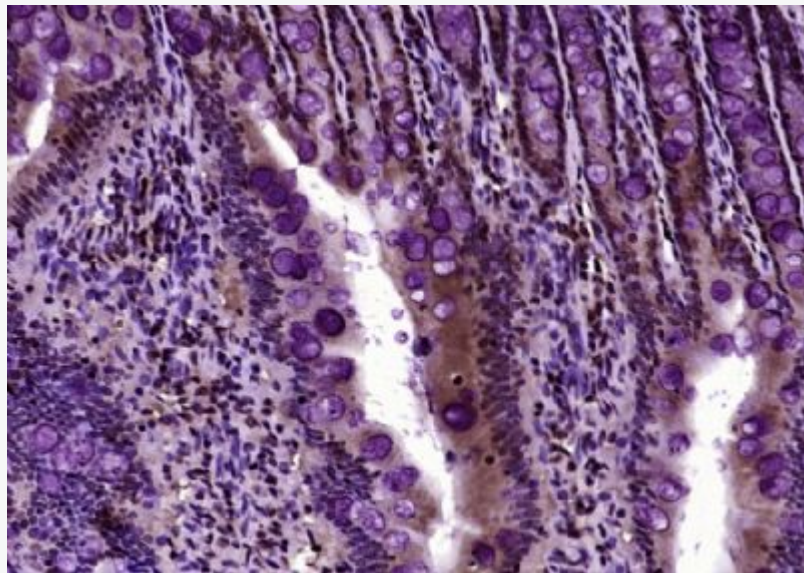
[Unigene: 138090](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

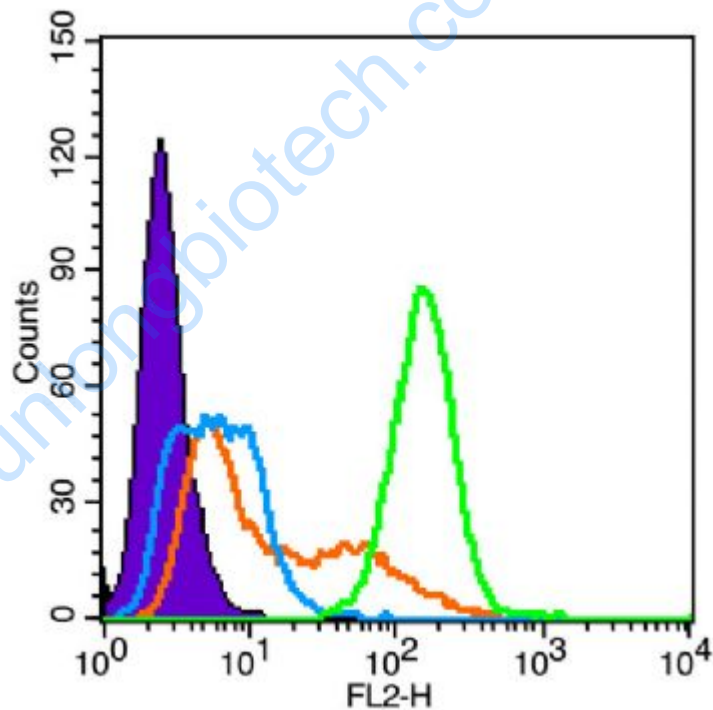


Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Histone H3 (acetyl K27)) Polyclonal Antibody, Unconjugated (SL7451R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Histone H3 (acetyl K27)) Polyclonal Antibody, Unconjugated (SL7451R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): B16(purple). Primary Antibody (green line): Rabbit Anti-Histone H3 (acetyl K27)antibody (SL7451R) Dilution: 1µg /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE Dilution: 1µg /test. Protocol The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 20

min on ice. The cells were then incubated in 10% goat serum to block non-specific protein-protein interactions for 30min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.