

## Histone H3 (Acetyl Lys27) Polyclonal Antibody

Catalog No: YK0010

**Reactivity:** Human; Mouse; Rat; Monkey; Arabidopsis thaliana

**Applications:** WB;IHC;IF;IP;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** 

Mouse Gene Id:

No:

319152/15077/15078

P68431/Q71DI3/P84243

**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 Lys27. AA range:11-60

Specificity: Acetyl-Histone H3 (K27) Polyclonal Antibody detects endogenous levels of

Histone H3 protein only when acetylated at K27.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/4



**Dilution:** WB 1:500 - 1:2000, IHC 1:100 - 1:300, IF 1:200 - 1:1000, IP 1:200 ELISA:

1:5000. Not yet tested in other applications.

**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

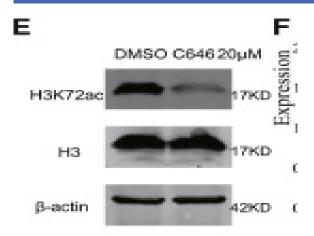
Subcellular Location:

Nucleus. Chromosome.

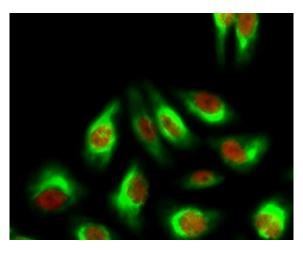
**Expression:** Blood, Epithelium, Kidney, Lung, Ovary, Spleen, Uterus,



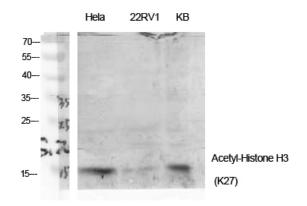
## **Products Images**



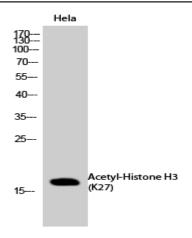
Zhao, Hongying, et al. "Comprehensive landscape of epigenetic-dysregulated IncRNAs reveals a profound role of enhancers in carcinogenesis in BC subtypes." Molecular Therapy-Nucleic Acids 23 (2021): 667-681.



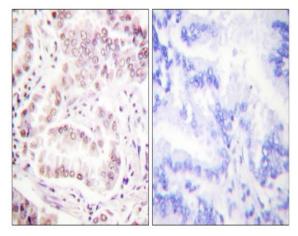
Immunofluorescence analysis of Hela cell. 1,Histone H3 (Acetyl Lys27) Polyclonal Antibody(red) was diluted at 1:200(4° overnight). CYCS Monoclonal Antibody(4B10)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



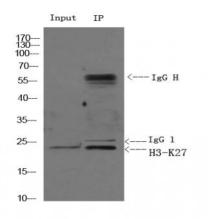
Western Blot analysis of various cells using Acetyl-Histone H3 (K27) Polyclonal Antibody diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western Blot analysis of Hela cells using Acetyl-Histone H3 (K27) Polyclonal Antibody diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using Histone H3 (Acetyl-Lys27) Antibody. The picture on the right is blocked with the synthesized peptide.



1) Input: Hela Lysate 2) IP product: IP dilute 1: 200 Western blot analysis: primary antibody: 1:2000 Secondary antibody: Goat anti-Mouse IgG(RS0002), 1: 5000