



# Histone H3 (Acetyl Lys27) Polyclonal Antibody

<b>Catalog No</b>	BYab-00838
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey;Arabidopsis thaliana
<b>Applications</b>	WB;IHC;IF;IP;ELISA
<b>Gene Name</b>	HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H3F3B
<b>Protein Name</b>	Histone H3.1/Histone H3.2/Histone H3.3
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Histone H3 around the acetylated site of Lys27. AA range:11-60
<b>Specificity</b>	Acetyl-Histone H3 (K27) Polyclonal Antibody detects endogenous levels of Histone H3 protein only when acetylated at K27.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. IP 1:200 ELISA: 1/5000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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;H3k27AC
<b>Observed Band</b>	17kD
<b>Cell Pathway</b>	Nucleus. Chromosome.
<b>Tissue Specificity</b>	Blood,Epithelium,Kidney,Lung,Ovary,Spleen,Uterus,
<b>Function</b>	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

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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!

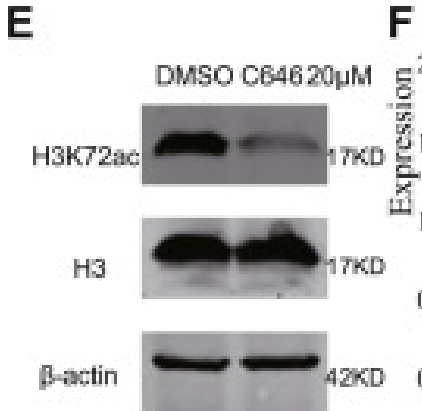
#### Usage suggestions

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

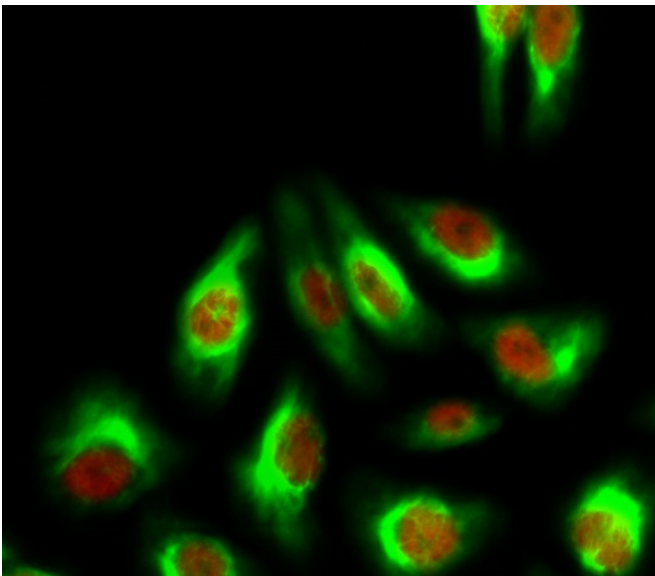
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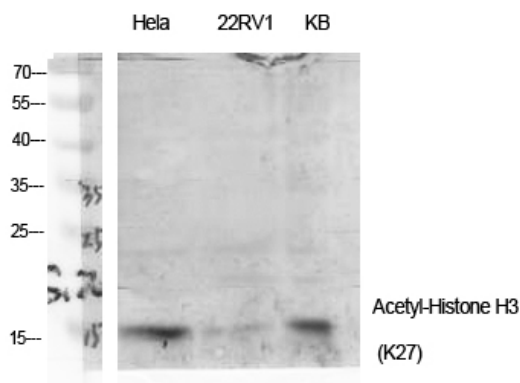
## Products Images



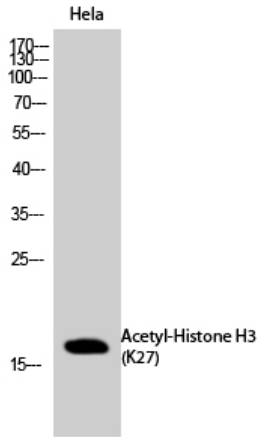
Zhao, Hongying, et al. "Comprehensive landscape of epigenetic-dysregulated lncRNAs reveals a profound role of enhancers in carcinogenesis in BC subtypes." *Molecular Therapy-Nucleic Acids* 23 (2021): 667-681.



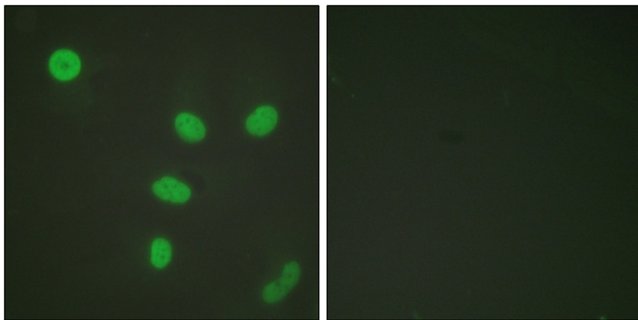
Immunofluorescence analysis of HeLa cell. 1, Histone H3 (Acetyl Lys27) Polyclonal Antibody (red) was diluted at 1:200 (4 $^{\circ}$  overnight). CYCS Monoclonal Antibody (4B10) (green) was diluted at 1:200 (4 $^{\circ}$  overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (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



Immunofluorescence analysis of HeLa cells, using Histone H3 (Acetyl-Lys27) Antibody. The picture on the right is blocked with the synthesized peptide.