

## Acetyl Histone H2A (K5) Polyclonal Antibody

Catalog No: YK0002

**Reactivity:** Human; Mouse; Rat

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

Target: Histone H2A

**Fields:** >>Necroptosis;>>Neutrophil extracellular trap

P0C0S5

P0C0S6

formation;>>Alcoholism;>>Systemic lupus erythematosus

Gene Name: H2AFZ

**Protein Name:** Histone H2A.Z

Human Gene Id: 3015

**Human Swiss Prot** 

No:

Mouse Gene Id: 51788

**Mouse Swiss Prot** 

No:

Rat Gene Id: 58940

Rat Swiss Prot No: P0C0S7

Immunogen: The antiserum was produced against synthesized peptide derived from human

Histone H2A around the acetylated site of Lys5. AA range:1-50

**Specificity:** Acetyl-Histone H2A (K5) Polyclonal Antibody detects endogenous levels of

Histone H2A protein only when acetylated at K5.

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

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500-2000 IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

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**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: 14kD

**Cell Pathway :** Protein\_Acetylation

**Background :** Histones are basic nuclear proteins that are responsible for the nucleosome

structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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 encodes a replication-independent member of the histone H2A family that is distinct from other members of the family. Studies in mice have shown that this particular histone is required for embryonic development and indicate that lack of functional histone H2A leads to embryonic lethality. [provided by RefSeq, Jul

2008],

**Function:** function: Variant histone H2A which replaces conventional H2A in a subset of

nucleosomes. 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. May be involved in the formation of constitutive heterochromatin. May be required for chromosome segregation during cell division.,mass spectrometry:Monoisotopic, not modified

PubMed:16457589,PTM:Acetylated on Lys-5, Lys-8 and Lys-12 during interphase. Acetylation disappears at mitosis.,PTM:Monoubiquitination of Lys-122 gives a specific tag for epigenetic transcriptional repression.,PTM:Not

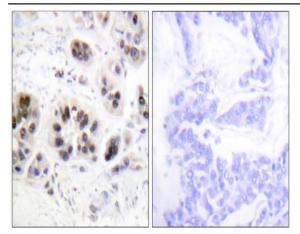
phosphor

Subcellular Location:

Nucleus. Chromosome.

**Expression:** Brain, Epithelium, Skeletal muscle, Uterus,

## **Products Images**



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Histone H2A (Acetyl-Lys5) Antibody. The picture on the right is blocked with the synthesized peptide.