

## Rabbit Anti-Histone H2A.Z antibody

SLM-52098R

<b>Product Name</b>	Histone H2A.Z
<b>Chinese Name</b>	组蛋白 H2AZRecombinant rabbit monoclonal anti
<b>Alias</b>	H2A histone family member Z; H2A.z; H2A/z; H2AFZ; H2AZ; MGC117173; H2AZ_HUMAN.
<b>Research Area</b>	Cell biology Developmental biology Epigenetics
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>React Species</b>	Human, (predicted: Mouse, Rat, ) WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Theoretical molecular weight</b>	13kDa
<b>Cellular localization</b>	The nucleus cytoplasmic
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	Recombinant human Histone H2A.Z protein (1-100aa)
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Buffer Solution</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>PubMed</b>	<a href="#">PubMed</a>
<b>Product</b>	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the

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## Detail

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:

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.

### Subunit:

The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA. H2A or its variant H2AFZ forms a heterodimer with H2B. H2AFZ interacts with INCENP.

### Subcellular Location:

Nucleus. Chromosome.

### Post-translational modifications:

Monoubiquitination of Lys-122 gives a specific tag for epigenetic transcriptional repression.

Acetylated on Lys-5, Lys-8 and Lys-12 during interphase. Acetylation disappears at mitosis (By similarity).

Not phosphorylated.

### Similarity:

Belongs to the histone H2A family.

### SWISS:

P0C0S5

### Gene ID:

3015

**Database links:**

[Entrez Gene: 3015](#) Human

[Entrez Gene: 51788](#) Mouse

[Entrez Gene: 58940](#) Rat

[Omim: 142763](#) Human

[SwissProt: P0C0S5](#) Human

[SwissProt: P0C0S6](#) Mouse

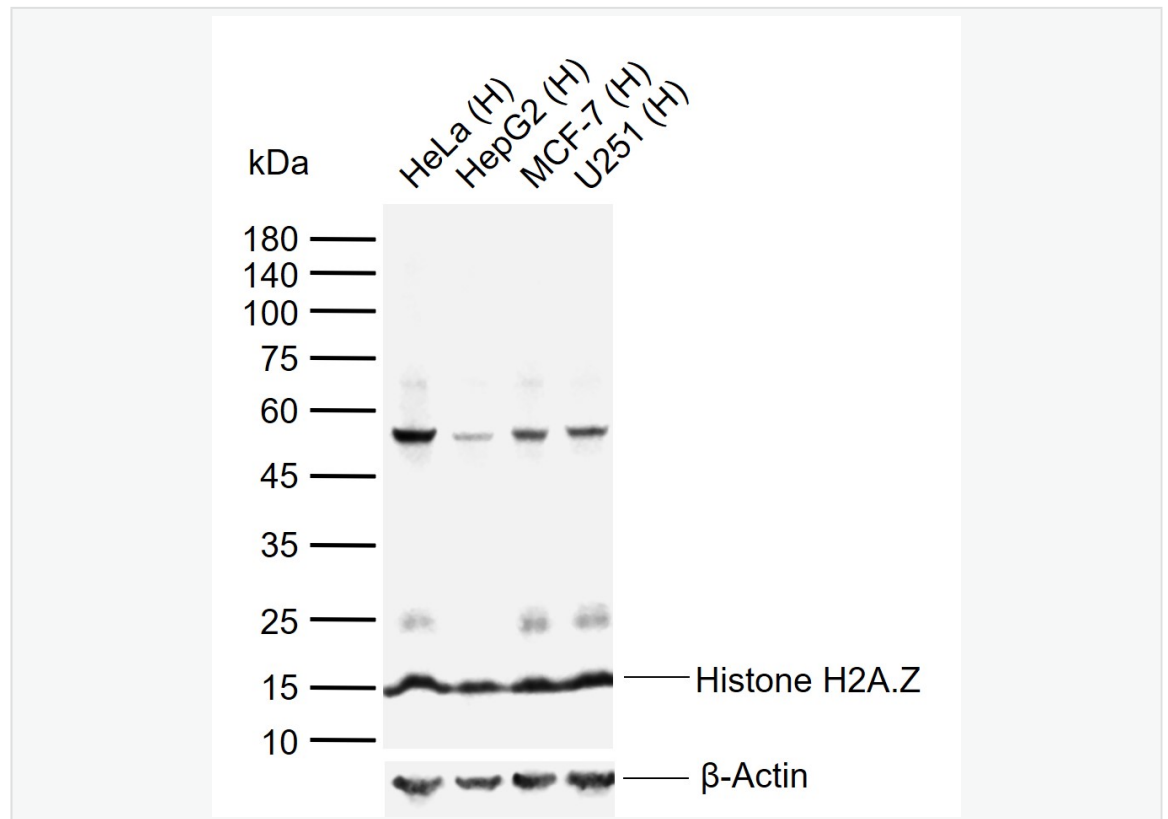
[SwissProt: P0C0S7](#) Rat

[Unigene: 119192](#) Human

[Unigene: 117541](#) Mouse

[Unigene: 112573](#) Rat

**Product  
Picture**



Sample:

Lane 1: Human HeLa cell lysates

Lane 2: Human HepG2 cell lysates

Lane 3: Human MCF-7 cell lysates

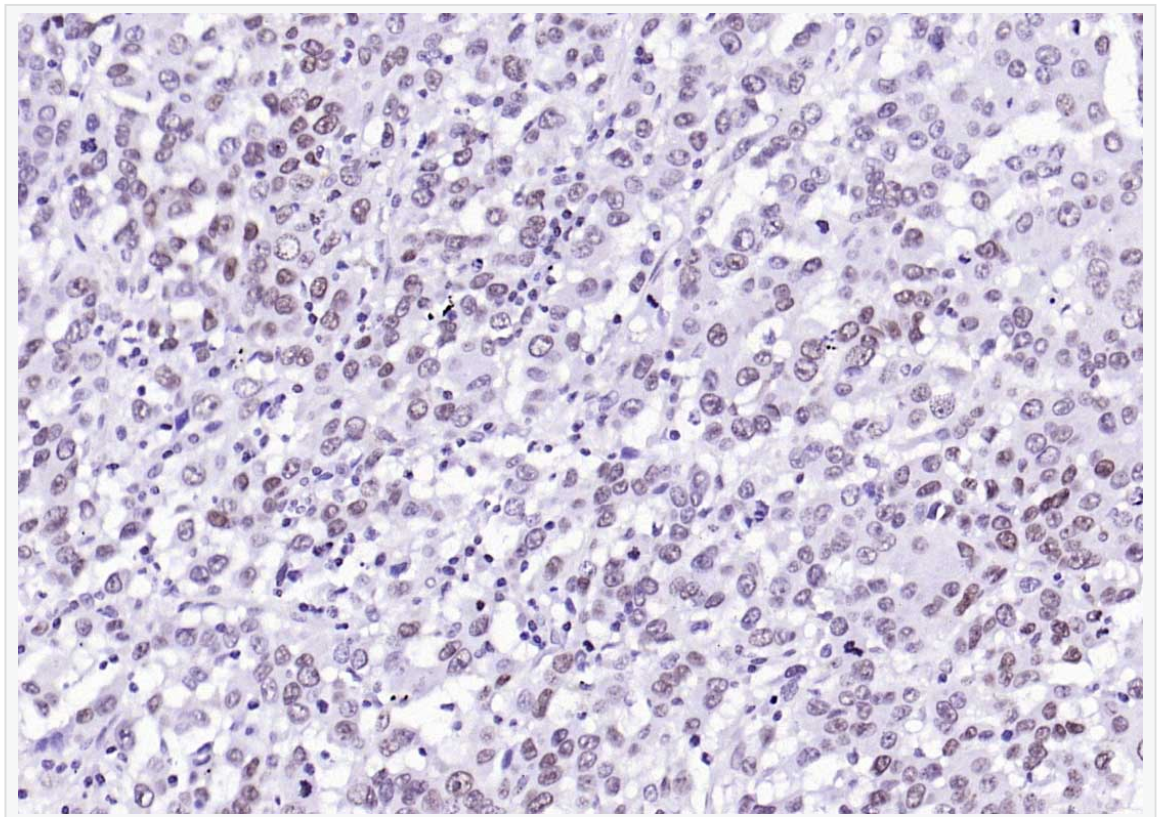
Lane 4: Human U251 cell lysates

Primary: Anti-Histone H2A.Z (SLM-52098R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 13 kDa

Observed band size: 15 kDa





Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); 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 H2A.Z) Monoclonal Antibody, Unconjugated (SLM-52098R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.