

## Histone H2A (Phospho Ser129) Rabbit pAb

CatalogNo: YP1654 **Orthogonal Validated** 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB

#### MW

- 14kD (Observed)

#### Isotype

- IgG

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** PBS, pH 7.4, containing 0.5% BSA, 0.02% sodium azide as Preservative and 50% Glycerol.

### Recommended Dilution Ratios

WB 1:1000-2000

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** Synthetic Peptide of Histone H2A (Phospho Ser129)

**Specificity** The antibody detects endogenous Histone H2A (Phospho Ser129) protein.

### Target Information

**Gene name** HIST1H2AG/HIST1H2AI/HIST1H2AK/HIST1H2AL/HIST1H2AM/HIST2H2AA3/HIST2H2AA4/HIST3H2A

**Protein Name** Histone H2A type 1/Histone H2A type 2/Histone H2A type 3

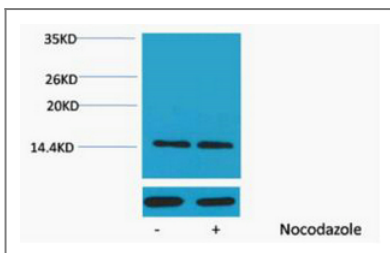
Organism	Gene ID	UniProt ID
Human	<a href="#">8329</a> ; <a href="#">8330</a> ; <a href="#">8332</a> ; <a href="#">8336</a> ; <a href="#">8969</a> ; <a href="#">723790</a> ; <a href="#">8337</a> ; <a href="#">92815</a> ;	<a href="#">P0C0S8</a> ; <a href="#">Q6FI13</a> ; <a href="#">Q7L7L0</a> ;
Mouse	<a href="#">319164</a> ; <a href="#">15267</a> ; <a href="#">319162</a> ;	
Rat	<a href="#">365877</a> ; <a href="#">64646</a> ;	<a href="#">P02262</a> ; <a href="#">P0CC09</a> ; <a href="#">Q4FZT6</a> ;

**Cellular Localization** Nucleus. Chromosome.

**Tissue specificity** Bone ,Brain ,Colon ,Eye ,Lymph ,PCR rescued clones ,Placenta ,Spleen

**Function** 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 ,PTM:Deiminated on Arg-4 in granulocytes upon calcium entry. ,PTM:Monoubiquitination of Lys-120 by RING1 and RNF2/RING2 complex gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. It is involved in the initiation of both imprinted and random X inactivation. Ubiquitinated H2A is enriched in inactive X chromosome chromatin. Ubiquitination of H2A functions downstream of methylation of 'Lys-27' of histone H3. Monoubiquitination of Lys-120 by RNF2/RING2 can also be induced by ultraviolet and may be involved in DNA repair. Following DNA double-strand breaks (DSBs) , it is ubiquitinated through 'Lys-63' linkage of ubiquitin moieties by the E2 ligase UBE2N and the E3 ligases RNF8 and RNF168 , leading to the recruitment of repair proteins to sites of DNA damage. Monoubiquitination and ionizing radiation-induced 'Lys-63'-linked ubiquitination are distinct events. ,PTM:Phosphorylation on Ser-2 is enhanced during mitosis. Phosphorylation on Ser-2 by RPS6KA5/MSK1 directly represses transcription. Acetylation of H3 inhibits Ser-2 phosphorylation by RPS6KA5/MSK1. ,PTM:Symmetric dimethylation on Arg-4 by the PRDM1/PRMT5 complex may play a crucial role in the germ-cell lineage. ,PTM:The chromatin-associated form is phosphorylated on Thr-121 during mitosis. ,similarity:Belongs to the histone H2A family. ,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. ,

## Validation Data



Western blot analysis of extracts from HeLa cells, untreated (-) or treated, 1:5000. Secondary antibody (catalog#:RS0002) was diluted at 1:20000

## Contact information

Orders: order.cn@immunoway.com  
Support: support.cn@immunoway.com  
Telephone: 400-8787-807(China)  
Website: <http://www.immunoway.com.cn>  
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code  
to access additional  
product information:  
**Histone H2A**  
**(Phospho Ser129)**  
**Rabbit pAb**

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