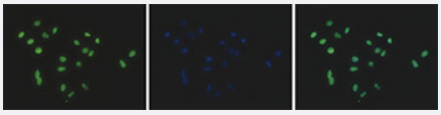
# Histone H2A (pan) polyclonal antibody

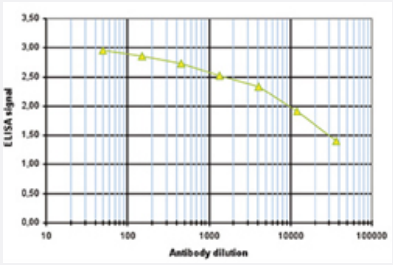
Catalog # PAB31307 Size 50 ug

## Applications



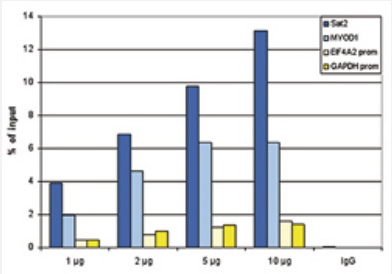
### Immunofluorescence

Immunofluorescent staining of Hela cell line with antibody followed by an anti-rabbit antibody conjugated to Alexa488 (left). The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings (right).




### Enzyme-linked Immunoabsorbent Assay

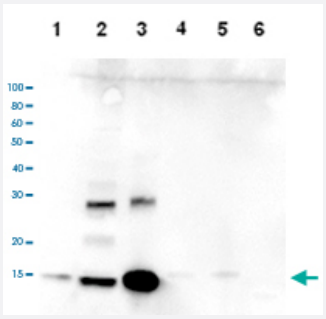
ELISA is a quantitative method used to determine the titer of the antibody using a serial dilution of antibody against Histone H2A (pan) in antigen coated wells. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:32500.




### ChIP

ChIP assays were performed using human HeLa cells. A titration of the antibody consisting of 1, 2, 5, and 10 ug per ChIP experiment was analysed. IgG (5 ug/IP) was used as negative IP control. QPCR was performed with primers for the GAPDH and EIF4A2 promoters, used as negative controls and for the inactive MYOD1 gene and the Sat2 satellite repeat, used as positive controls. The figure shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

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## Western Blot

Western Blot analysis of (1) 25 ug whole cell extracts of Hela cells, (2) 15 ug histone extracts of Hela cells, (3) 1 ug of recombinant histone H2A, (4) 1 ug of recombinant histone H2B, (5) 1 ug of recombinant histone H3, (6) 1 ug of recombinant histone H4.

## Specification

| | |
|---|---|
| **Product Description** | Rabbit polyclonal antibody raised against synthetic peptide of Histone H2A (pan). |
| **Immunogen** | A synthetic peptide (conjugated with KLH) corresponding to unmodified sequence at C-terminus of H istone H2A. |
| **Host** | Rabbit |
| **Reactivity** | Human |
| **Form** | Liquid |
| **Purification** | Affinity purification |
| **Recommend Usage** | ELISA (1:100-1000)<br>Western Blot (1:2000)<br>ChIP (1-2 ug/CHIP)<br>Immunofluorescence (1:500)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS (0.05% sodium azide, 0.05% proclin 300). |
| **Storage Instruction** | Store at -20°C. For long term storage store at -80°C.<br>Aliquot to avoid repeated freezing and thawing. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

- Immunofluorescence

Immunofluorescent staining of Hela cell line with antibody followed by an anti-rabbit antibody conjugated to Alexa488 (left). The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings (right).

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## Gene Info — HIST3H2A

| | |
|---|---|
| **Entrez GeneID** | 92815 |
| **Protein Accession#** | Q7L7L0 |
| **Gene Name** | HIST3H2A |
| **Gene Alias** | MGC3165 |
| **Gene Description** | histone cluster 3, H2a |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped aro und a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H 4). 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 member of the histone H2A family. Transcripts from this gene contain a palindrom ic termination element. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000037948\|histone 3, H2a\|histone H2a |

## Pathway

- Systemic lupus erythematosus

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