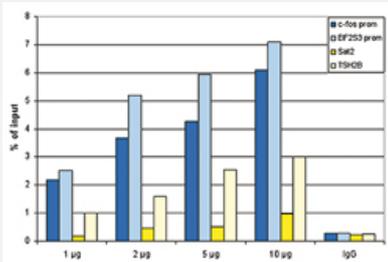


# Histone H2AZ polyclonal antibody

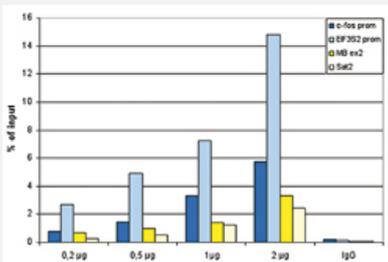
Catalog # PAB31308      Size 50 ug

## Applications



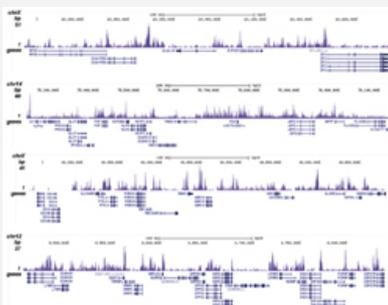
### ChIP

ChIP assays were performed using human HeLa cells. A titration consisting of 1, 2, 5 and 10 ug of antibody per ChIP experiment was analyzed. IgG (2 ug/IP) was used as a negative IP control. Quantitative PCR was performed with primers specific for the promoter of the active genes c-fos and EIF2S3, used as positive controls, and for the inactive TSH2B gene and the Sat2 satellite repeat, used as negative controls.



### ChIP

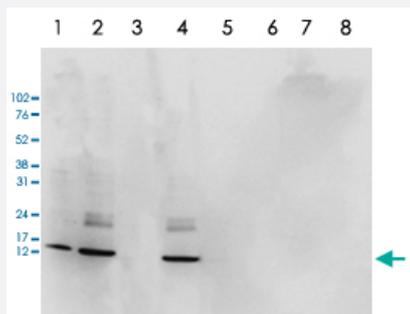
ChIP assays were performed using human K562 cells. A titration of the antibody consisting of 0.2, 0.5, 1 and 2 ug per ChIP experiment was analysed. IgG (1 ug/IP) was used as negative IP control. Quantitative PCR was performed with primers specific for the promoter of the active genes c-fos and EIF2S3, used as positive controls, and for the coding region of the inactive MB gene and the Sat2 satellite repeat, used as negative controls. The figure shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).



### ChIP-Seq

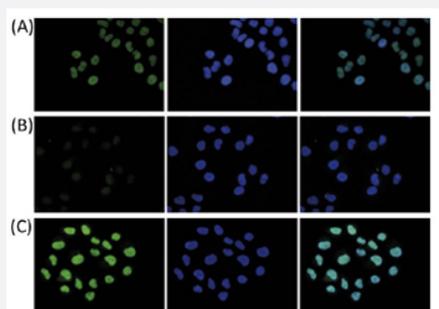
ChIP was performed on sheared chromatin from 100,000 K562 cells using 0.5 ug of antibody. The figure shows the peak distribution in four genomic regions including the regions surrounding the EIF2S3 and c-fos positive control genes on chromosome X and 14, respectively.

## Western Blot



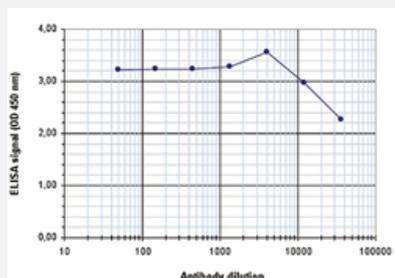
Western Blot analysis of (1) 25 ug whole cell extracts of HeLa cells, (2) 15 ug histone extracts of HeLa cells, (3) histone extracts after incubation of the antibody with 1 ug of the peptide used for immunisation of the rabbit, (4) histone extracts after incubation of the antibody with a peptide containing a sequence from the central part of the Histone H2AZ protein, (5) 1 ug of recombinant histone H2A, (6) 1 ug of recombinant histone H2B, (7) 1 ug of recombinant histone H3, (8) 1 ug of recombinant histone H4.

## Immunofluorescence



Immunofluorescent staining of HeLa cell line with antibody followed by (A) 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). (B) After incubation of the antibody with 10 ng/ul of the peptide used for immunisation of the rabbit and (C) with a peptide containing a sequence from the central part of the Histone H2AZ protein.

## 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 H2AZ. The antigen used was a peptide containing the histone modification of interest. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:87500.

## Specification

**Product Description** Rabbit polyclonal antibody raised against synthetic peptide of Histone H2AZ.

**Immunogen** A synthetic peptide (conjugated with KLH) corresponding to C-terminus of Histone HAZ.

**Host** Rabbit

**Reactivity** Human, Mouse

**Form** Liquid

**Purification** Affinity purification

<b>Recommend Usage</b>	ELISA (1:5000) Western Blot (1:1000) ChIP (0.5-1 ug/IP) Immunofluorescence (1:500) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS (0.05% sodium azide, 0.05% proclin 300).
<b>Storage Instruction</b>	Store at -20°C. For long term storage store at -80°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- ChIP

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## Gene Info — H2AFZ

Entrez GeneID	<a href="#">3015</a>
Protein Accession#	<a href="#">P0C0S5</a>
Gene Name	H2AFZ
Gene Alias	H2A.z, H2A/z, H2AZ, MGC117173
Gene Description	H2A histone family, member Z
Omim ID	<a href="#">142763</a>
Gene Ontology	<a href="#">Hyperlink</a>

### Gene Summary

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]

Other Designations	H2AZ histone
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## Pathway

- [Systemic lupus erythematosus](#)