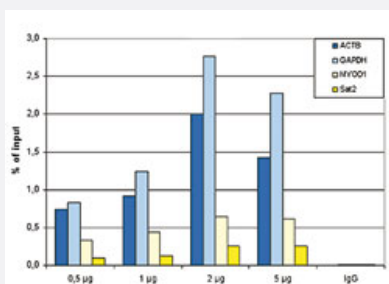


Histone H3 (K14ac) polyclonal antibody

Catalog # PAB31260

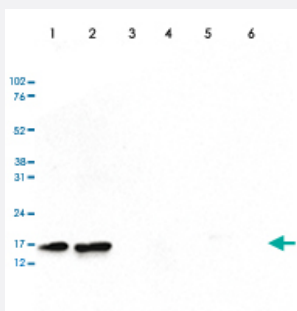
Size 50 ug

Applications



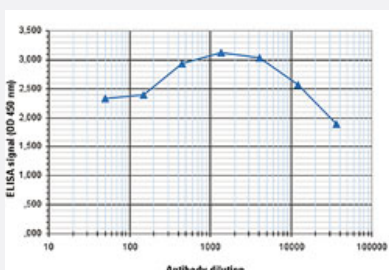
ChIP

ChIP assays were performed using human HeLa cells. A titration of the antibody consisting of 0.5, 1, 2 and 5 ug per ChIP experiment was analysed. IgG (1 ug/IP) was used as negative IP control. QPCR was performed with primers for a region approximately 1 kb upstream of the ACTB and GAPDH promoters, used as positive controls, and for the coding region of the inactive MYOD1 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).



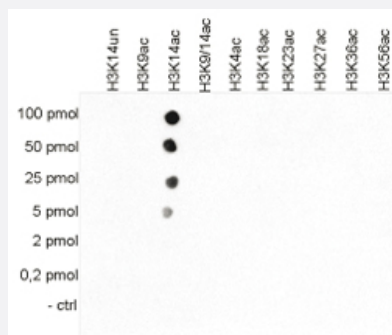
Western Blot (Cell lysate)

Western Blot (Cell lysate) 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, and (6) 1 ug of recombinant histone H4.



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 H3 (K14ac) in antigen coated wells. 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 1:73200.



Dot Blot

Cross reactivity tests using the Histone H3 (K14ac) antibody.

Dot Blot analysis was performed with peptides containing other histone modifications and the unmodified H3K14. One hundred to 0.2 pmol of the respective peptides were spotted on a membrane. The antibody was used at a dilution of 1:10000. The figure shows a high specificity of the antibody for the modification of interest.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of Histone H3 (K14ac).
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to human histone H3, acetylated at lysine 14.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Affinity purification
Recommend Usage	ELISA (1:1000-5000) Western Blot (1:1000) ChIP (2 ug/CHIP) Dot Blot (1:10000) 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. Aliquot to avoid repeated freezing and thawing.
Note	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 — HIST1H3A

Entrez GeneID [8350](#)

Protein Accession# [Q93081](#)

Gene Name HIST1H3A

Gene Alias H3/A, H3FA

Gene Description histone cluster 1, H3a

Omim ID [602810](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq]

Other Designations

H3 histone family, member A|histone 1, H3a

Pathway

- [Systemic lupus erythematosus](#)