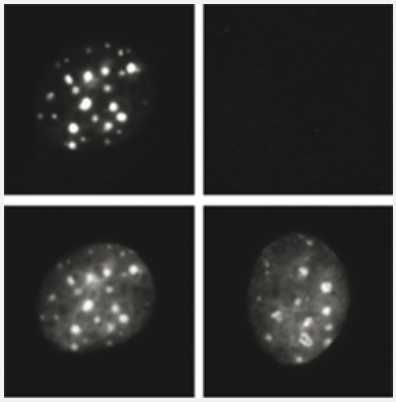
Histone H3 (K9me3) monoclonal antibody (Biotin)

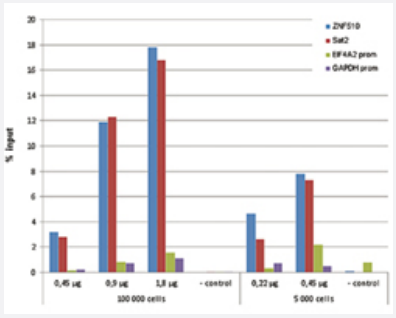
Catalog # MAB15852 Size 50 ug

Applications



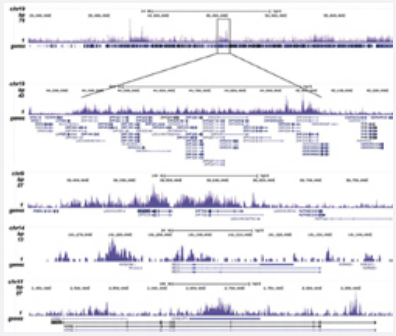
Immunofluorescence

Immunofluorescent staining of NIH 3T3 cell line with antibody (left). Negative control recombinant antibody (right). The bottom panel shows counterstaining of the cells with DAPI.



ChIP

ChIP assays were performed using human HeLa cells. Different amounts of the antibody were analysed. A negative control recombinant antibody 1 or 5 ug/IP was used as negative IP control. QPCR was performed with primers for the heterochromatin marker Sat2 and for the ZNF510 gene, used as positive controls, and for the promoters of the active EIF4A2 and GAPDH genes, 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 4 million K562 cells. The figure shows the signal distribution along the long arm of chromosome 19 and a zoomin to an enriched region containing several ZNF repeat genes. The enrichment at ZNF510 and enrichment at the MEG3 and KCNQ1 imprinted genes.

Specification

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Product Description	Fab format with human framework monoclonal antibody raised against Histone H3 (K9me3).
Immunogen	Recombinant antibody corresponding to Histone H3, trimethylated at lysine 9.
Reactivity	Fruit fly, Human, Mouse, Yeast
Form	Liquid
Conjugation	Biotin
Purification	Affinity purification
Recommend Usage	ChIP (0.2-1.8 ug/ChIP) Immunofluorescence (1:500) The optimal working dilution should be determined by the end user.
Supplied Products	negative control
Storage Buffer	In PBSE (0.2% sucrose).
Storage Instruction	Store at -20°C. For long term storage store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Immunofluorescence

  Immunofluorescent staining of NIH 3T3 cell line with antibody (left). Negative control recombinant antibody (right). The bottom panel shows counterstaining of the cells with DAPI.

- ChIP

  ChIP assays were performed using human HeLa cells. Different amounts of the antibody were analysed. A negative control recombinant antibody 1 or 5 ug/IP was used as negative IP control. QPCR was performed with primers for the heterochromatin marker Sat2 and for the ZNF510 gene, used as positive controls, and for the promoters of the active EIF4A2 and GAPDH genes, 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 4 million K562 cells. The figure shows the signal distribution along the long arm of chromosome 19 and a zoomin to an enriched region containing several ZNF repeat genes. The enrichment at ZNF510 and enrichment at the MEG3 and KCNQ1 imprinted genes.

Gene Info — HIST1H3A

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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 chro mosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped ar ound 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, H 1, 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 t ails; instead, they contain a palindromic termination element. This gene is found in the large histon e gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member A|histone 1, H3a

Pathway

- Systemic lupus erythematosus

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