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Datasheet for ABIN6972138

anti-Histone H4 antibody (acLys8)

5 Images

Overview

Quantity:	100 µg
Target:	Histone H4
Binding Specificity:	acLys8
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone H4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Dot Blot (DB), Immunocytochemistry (ICC), ChIP DNA-Sequencing (ChIP-seq)

Product Details

Immunogen:	This Histone H4 acetyl Lys8 antibody was raised against a peptide containing acetyl Lys8 of human Histone H4.
Isotype:	IgG
Characteristics:	Histone H4 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points, it is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation,

Product Details

ADP-ribosylation, carbonylation and SUMOylation, they play a major role in regulating gene expression. Lysine N-e-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in chromatin remodeling and in the regulation of gene expression in various cellular functions. The chromatin-remodeling complex SWI/SNF is recruited to promoters through the interaction of the bromodomain of the protein BRG1, belonging to the SWI/SNF complex, and CBP-acetylated histone H4 Lysine 8, leading to a chromatin remodeling. Histone H4K8ac antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, Dot blot, Immunocytochemistry, Immunofluorescence and Western blot, it has been shown to react with Human and Mouse samples, but it is predicted that it will react with a wide range of sample types.

Purification: Protein A Chromatography

Target Details

Target: Histone H4

Abstract: [Histone H4 Products](#)

Molecular Weight: 8 kDa

NCBI Accession: [NP_778224](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

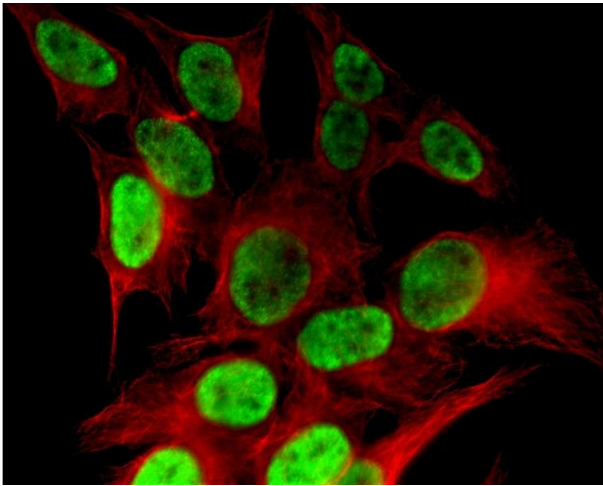
Buffer: Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

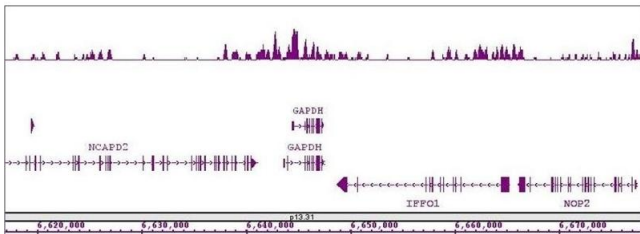
Storage: -20 °C

Storage Comment: Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.



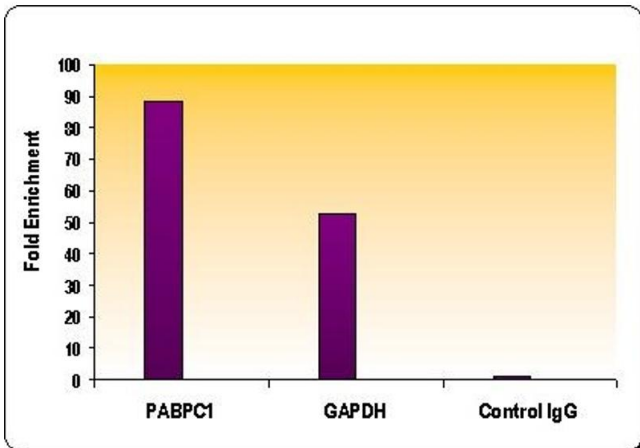
Immunofluorescence

Image 1. Histone H4K8ac antibody (pAb) tested by immunofluorescence. HeLa cells stained with Histone H4K8ac antibody (green) at a 1 µg/mL dilution. Tubulin staining was done with our alpha Tubulin antibody,(red) at a 1:1,000 dilution.



ChIP DNA-Sequencing

Image 2. Histone H4K8ac antibody (pAb) tested by ChIP-Seq. ChIP was performed using the ChIP-IT High Sensitivity Kit with 30 µg of chromatin from a human medulloblastoma cell line and 4 µg of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 19 million sequence tags were mapped to identify Histone H4K8ac binding sites. The image shows binding across a region of chromosome 12.



Chromatin Immunoprecipitation

Image 3. Histone H4K8ac antibody (pAb) tested by Chromatin IP. ChIP performed using HeLa Chromatin (1.5 x 10⁶ cell equivalents per ChIP) and 10 µg of Histone H4 acetyl Lys8 antibody (pAb) or the equivalent amount of rabbit IgG as a negative control. Real time, quantitative PCR (RT-qPCR) was performed on DNA purified from each of the ChIP reactions using a primer pair specific for either the PABPC1 gene or the GAPDH gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN6972138.