



[Go to Product page](#)

Datasheet for ABIN6972105

anti-Histone H4 antibody (acLys12)

4 Images

Overview

Quantity:	100 µg
Target:	Histone H4
Binding Specificity:	acLys12
Reactivity:	Human, Mouse, Saccharomyces cerevisiae
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)

Product Details

Immunogen:	This Histone H4 acetyl Lys12 antibody was raised against a peptide including acetyl-lysine 12 of 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 acetylation of histone H4 Lys12 is carried out by several histone acetyltransferases (HATs). Histone H4 Lys12 acetylation by TIP60 occurs in the nucleus, whereas Hat1-mediated acetylation of histone H4 Lys12 occurs in the cytoplasm, indicating the spatial regulation of histone acetylation. The acetylation of histone H4 Lys12 residue is commonly associated with transcriptional activation. Histone H4K12ac antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, Dot blot, Immunocytochemistry, Immunofluorescence and Western blot, it has been shown to react with Budding Yeast, 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 (pH 7.5) with 30 % glycerol and 0.035 % sodium azide.

Preservative: Sodium azide

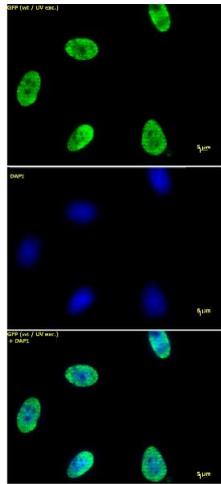
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -

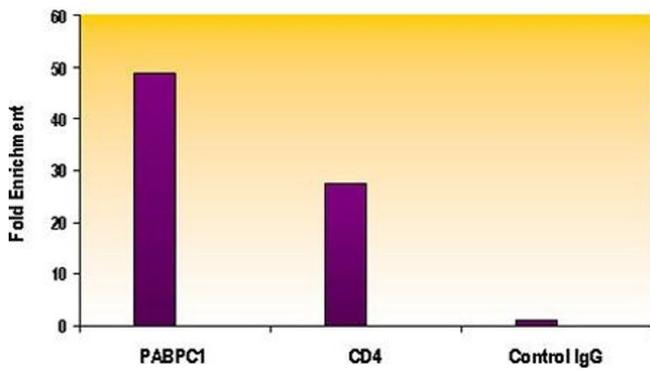
20°C for up to 2 years. Keep all reagents on ice when not in storage.

Images



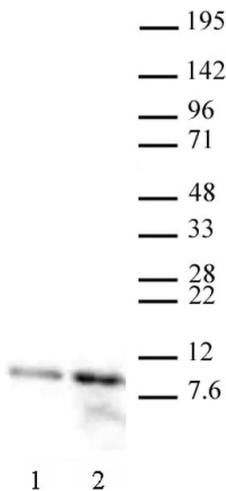
Immunofluorescence

Image 1. Histone H4 acetyl Lys12 antibody tested by immunofluorescence. HeLa cells stained at 2 μg/mL with Histone H4 acetyl Lys12 antibody. Top panel: Histone H4 acetyl Lys12 antibody. Middle panel: DAPI. Bottom panel: merge.



Chromatin Immunoprecipitation

Image 2. Histone H4 acetyl Lys12 antibody tested by ChIP analysis. Chromatin IP performed using the ChIP-IT Express Kit and HeLa Chromatin (1.5 x 10⁶ cell equivalents per ChIP) using 3 μg of Histone H4 acetyl Lys12 antibody 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 the indicated gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.



Western Blotting

Image 3. Histone H4 acetyl Lys12 antibody (pAb) tested by Western blot. HeLa nuclear extract (20 μg per lane) probed with Histone H4 acetyl Lys12 antibody (1 μg per ml). Lane 1: no treatment. Lane 2: cells treated with sodium butyrate.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6972105.