

Datasheet for ABIN5706800
anti-Histone H4 antibody (acLys8)



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4 Images

Overview

Quantity:	50 µg
Target:	Histone H4
Binding Specificity:	acLys8
Reactivity:	Human, Mouse, C. elegans
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone H4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Dot Blot (DB), Multiplex Assay (MA), Fluorescence Microscopy (FM)

Product Details

Purpose:	Histone H4 K8ac Antibody
Immunogen:	Immunogen: Histone H4 [ac Lys8] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 8 of human Histone H4. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This antibody reacts with human Histone H4.
Characteristics:	Synonyms: rabbit anti-Histone H4 Ac Lys8 antibody, H4K8ac, HIST2H4B, HIST1H4H, HIST1H4I, HIST1H4J, HIST1H4K, HIST1H4L, HIST2H4, HIST2H4A, HIST1H4A, HIST1H4B, HIST1H4C,

Product Details

HIST1H4D, HIST1H4E, HIST1H4F, histone cluster 4, H4, histone 4, H4

Purification: Anti-Histone H4 [ac Lys8] was affinity purified from monospecific antiserum by immunoaffinity chromatography.

Sterility: Sterile filtered

Target Details

Target: Histone H4

Abstract: [Histone H4 Products](#)

Background: Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational modifications work together to activate or repress the availability of DNA to be copied, transcribed, or repaired. These marks decide which DNA will be open and commonly active (euchromatin) or tightly wound to prevent access and activation (heterochromatin). Common histone modifications include methylation of lysine and arginine, acetylation of lysine, phosphorylation of threonine and serine, and sumoylation, biotinylation, and ubiquitylation of lysine. In particular, acetylation of H4 Lys5 (H4 Lys5Ac) has been linked to transcriptional activation and DNA repair. Newly assembled histones are typically acetylated on H4 at lysine 5 and 12. The enzyme histone acetyltransferase 1 (HAT1) is the primary modulator, and these marks are necessary for complete chromatin assembly. Anti-Histone H4 are ideal for researchers interested in Chromatin Research, DNA replication Transcription Translation and Splicing, Epigenetics, Chromatin Modifiers, Histones and Modified Histones, DNA Repair, and HA Epitope Tags research.

Gene ID: 121504

NCBI Accession: [NP_001029249](#)

UniProt: [P62805](#)

Application Details

Application Notes: Immunohistochemistry Dilution: 1:1000-1:2000
Application Note: Anti-Histone H4 [ac Lys8] antibody is tested for Western Blot, Dot Blot, Chromatin Immunoprecipitation, and Immunofluorescence/Immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~13

Application Details

kDa corresponding to Histone H4 protein by Western Blotting in HeLa histone prep lysate or the appropriate cell lysate or extract. Epi-Plus™ antibody production in collaboration with Novus Biologicals.

ChIP Dilution: 2-5 µg/million cells

Western Blot Dilution: 0.2 µg/mL

IF Microscopy Dilution: 1:1000-1:2000

Other: Dot Blot 1:1000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.85 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: 30 % Glycerol

Preservative: 0.01 % (w/v) Sodium Azide

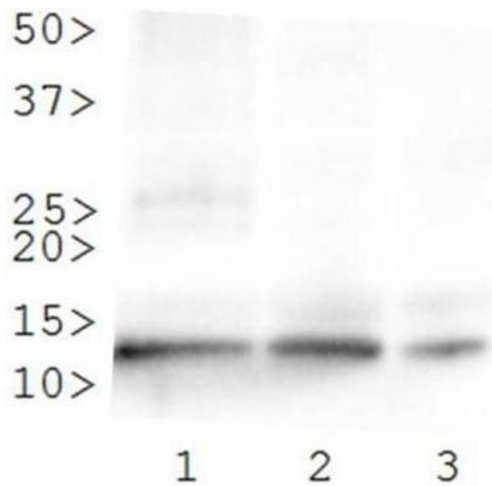
Preservative: Sodium azide

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

Storage: 4 °C, -20 °C

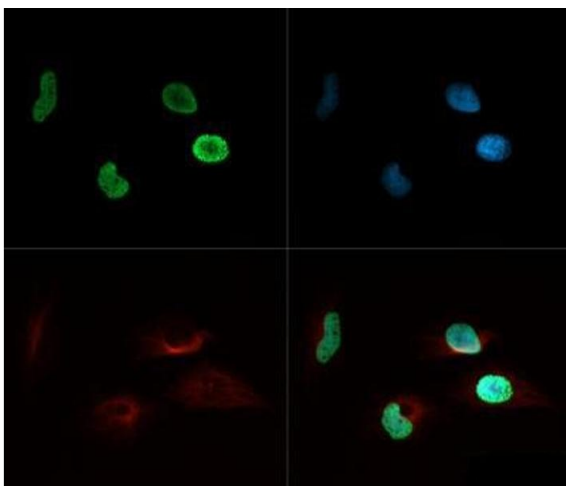
Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiry Date: 12 months



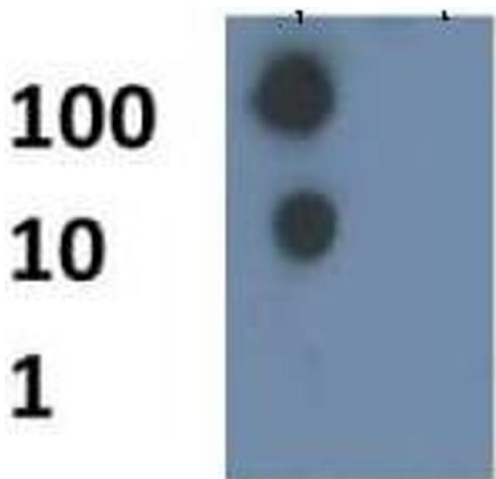
Western Blotting

Image 1. Western Blot of Rabbit Anti-Histone H4 [ac Lys8] Antibody. Lane 1: HeLa histone prep. Lane 2: 3T3 histone prep. Lane 3: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H4 [ac Lys8] at 0.2 µg/mL for overnight at 4 °C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5 % BLOTTO overnight at 4 °C. Predicted/Observed size: ~11 kDa. Other band(s): None.



Fluorescence Microscopy

Image 2. Immunofluorescence of Rabbit Anti-Histone H4 [ac Lys8] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H4 [ac Lys8] antibody at a 1:100 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H4 [ac Lys8] is nuclear. Staining: Histone H4 [ac Lys8] is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 550 (red).



Dot Blot

Image 3. Dot Blot of Rabbit Histone H4 [ac Lys8] Antibody. Lane 1: K8 Ac. Lane 2: K8 unmodified. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H4 [ac Lys8] antibody at 1:1000 for 45 min at 4 °C. Secondary antibody: Dylight™488 rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5 % BLOTTO overnight at 4 °C.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN5706800.