

Datasheet for ABIN5706799
anti-Histone H4 antibody (acLys5)



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4 Images

Overview

Quantity:	50 µg
Target:	Histone H4
Binding Specificity:	acLys5
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone H4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Multiplex Assay (MA), Fluorescence Microscopy (FM)

Product Details

Purpose:	Histone H4 K5ac Antibody
Immunogen:	Immunogen: Histone H4 [ac Lys5] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 5 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 Lys5 antibody, H4K5ac, HIST2H4B, HIST1H4H, HIST1H4I, HIST1H4J, HIST1H4K, HIST1H4L, HIST2H4, HIST2H4A, HIST1H4A, HIST1H4B, HIST1H4C, HIST1H4D, HIST1H4E, HIST1H4F, histone cluster 4, H4, histone 4, H4

Product Details

Purification:	Anti-Histone H4 [ac Lys5] was affinity purified from monospecific antiserum by immunoaffinity chromatography.
Sterility:	Sterile filtered

Target Details

Target:	Histone H4
Abstract:	Histone H4 Products
Background:	<p>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 Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.</p>
Gene ID:	121504
NCBI Accession:	NP_001029249
UniProt:	P62805

Application Details

Application Notes:	<p>Immunohistochemistry Dilution: 1:100</p> <p>Application Note: Anti-Histone H4 [ac Lys5] antibody is tested for Western Blot, Chromatin Immunoprecipitation, and Immunofluorescence. This antibody is suitable for Dot Blot and Immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~13 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.</p>
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Application Details

ChIP Dilution: 2-5 µg/million cells

Western Blot Dilution: 1:1000

IF Microscopy Dilution: 1:100

Other: Dot Blot 1:1000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.78 mg/mL

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

Stabilizer: 30 % Glycerol

Preservative: 0.01 % (w/v) Sodium Azide

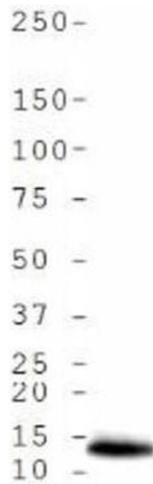
Preservative: Sodium azide

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

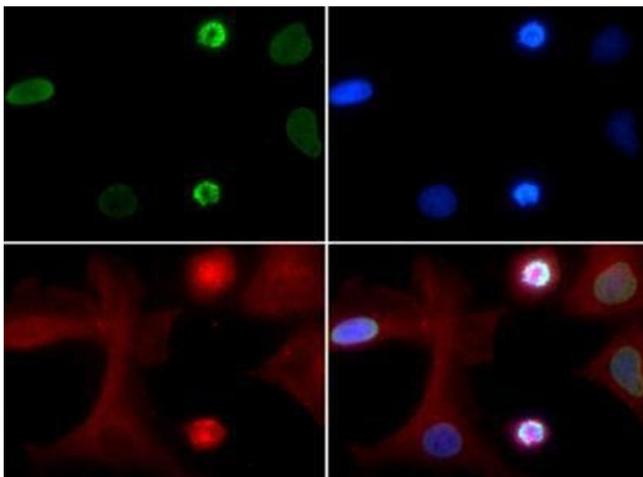
Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Expiry Date: 12 months



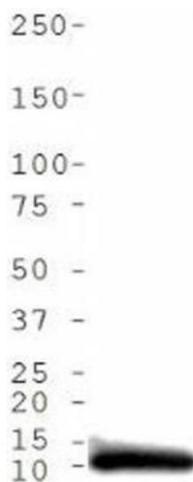
Western Blotting

Image 1. Western Blot of Rabbit Anti-Histone H4 [ac Lys5] Antibody. Lane 1: HeLa histone prep. Load: 30 µg per lane. Primary antibody: Histone H4 [ac Lys5] at 1:1000 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: ~13 kDa. Other band(s): None.



Fluorescence Microscopy

Image 2. Immunofluorescence of Rabbit Anti-Histone H4 [ac Lys5] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H4 [ac Lys5] antibody at a 1:100 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H4 [ac Lys5] is nuclear and chromosomal. Staining: Histone H4 [ac Lys5] is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 594 (red).



Western Blotting

Image 3. Western Blot of Rabbit Anti-Histone H4 [ac Lys5] Antibody. Lane 1: NIH-3T3 histone preps. Load: 30 µg per lane. Primary antibody: Histone H4 [ac Lys5] at 1:1000 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: ~13 kDa. Other band(s): None.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN5706799.