

Datasheet for ABIN5706885
anti-Histone H4 antibody (pSer1)



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5 Images

Overview

Quantity:	50 µg
Target:	Histone H4
Binding Specificity:	pSer1
Reactivity:	Human
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 phospho S1 Antibody
Immunogen:	Immunogen: Histone H4 [p Ser1] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phosphorylated peptide surrounding Serine 1 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 pS1 antibody, H4pS1, 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 [p Ser1] 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, phosphorylation of H4 Ser1 (H4 pS1) has been linked to mitosis and DNA repair. This modification is enriched in sites proximal to double stranded breaks, but not those associated with UV damage. Casein kinase II (CK2) phosphorylates H4 Ser1, and it also implicated in regulating the DNA damage response. Furthermore, recruitment of CK2 requires the SIN3/RPD3 histone deacetylase complex. Anti-Histone H4 are ideal for researchers interested in DNA Repair, Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, DNA replication Transcription Translation and Splicing, and Epigenetics research.</p>
Gene ID:	121504
NCBI Accession:	NP_001029249
UniProt:	P62805

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:50
	Application Note: Anti-Histone H4 [p Ser1] antibody is tested for Western Blot, Dot Blot, Chromatin Immunoprecipitation, Immunocytochemistry, and Immunofluorescence. Specific

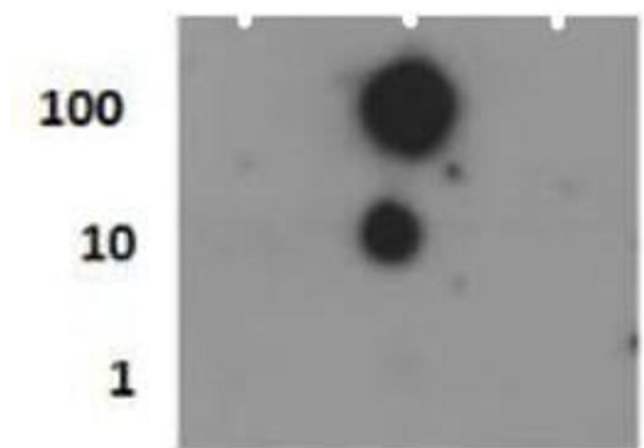
Application Details

	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.
	ChIP Dilution: 2-5 µg/million cells
	Western Blot Dilution: 1:1000
	IF Microscopy Dilution: 1:50
	Other: Dot Blot 0.1 µg/mL

Restrictions:	For Research Use only
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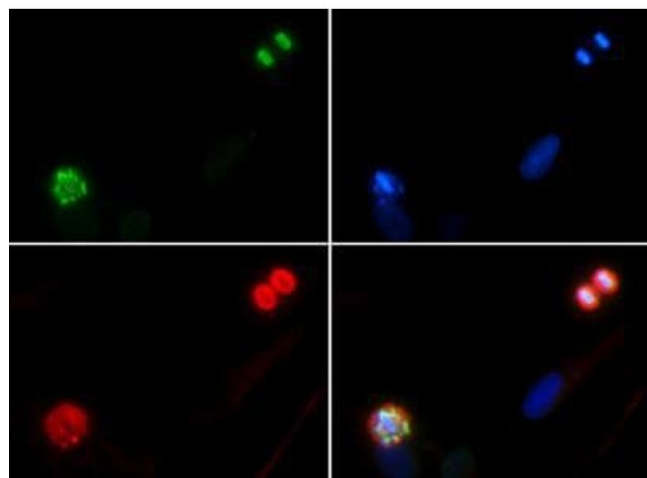
Handling

Format:	Liquid
Concentration:	0.89 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



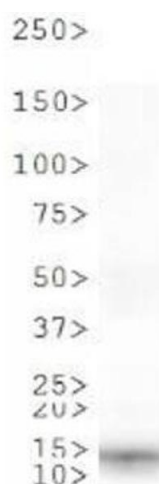
Dot Blot

Image 1. Dot Blot of Rabbit Histone H4 [p Ser1] Antibody. Lane 1: Histone H4, 1-15. Lane 2: Histone H4 pS1. Lane 3: Histone H4, 1-24. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H4 [p Ser1] antibody at 0.1 µg/mL 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.



Fluorescence Microscopy

Image 2. Immunofluorescence of Rabbit Anti-Histone H4 [p Ser1] Antibody. Tissue: Nonmitotic, prophase, and telophase HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H4 [p Ser1] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H4 [p Ser1] is nuclear. Staining: Histone H4 [p Ser1] 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 [p Ser1] Antibody. Lane 1: HeLa histone prep. Load: 30 µg per lane. Primary antibody: Histone H4 [p Ser1] 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 5 images are available for ABIN5706885.