Datasheet for ABIN5706753

anti-Histone 3 antibody (H3K18ac)

4 Images

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Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K18ac
Reactivity:	Human, Mouse, C. elegans
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Dot Blot (DB), Fluorescence Microscopy (FM)

Product Details

Purpose:	Histone H3 K18ac Antibody
Immunogen:	Immunogen: Histone H3 [ac Lys18] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 18 of human Histone H3.2. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This antibody reacts with human Histone H3.
Characteristics:	Synonyms: rabbit anti-Histone H3 Ac Lys18 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87782, MGC87783, H3K18ac
Purification:	Anti-Histone H3 [ac Lys18] was affinity purified from monospecific antiserum by

Product Details

	immunoaffinity chromatography.
Sterility:	Sterile filtered

Target Details

Target:	Histone 3 (H3)
Alternative Name:	Histone H3 (H3 Products)
Background:	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. Specifically, the acetylation of lysine 18 on histone 3 (H3 K18ac) is associated with transcriptional activation, DNA replication, and DNA repair. Enzymes known to acetylate K18 included Gcn5, p300, CBP, and TFIIIC90. Acetylation of this amino acid is also known to potentiate other arginine methylation sites on H3. Anti-Histone H3 are ideal for researchers interested in Chromatin Research, Epigenetics, Chromatin Modifiers, Histones and Modified Histones.
Gene ID:	126961
NCBI Accession:	NP_001005464
UniProt:	Q71DI3

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:500 Application Note: Anti-Histone H3 [ac Lys18] antibody is tested for Western Blot, Chromatin Immunoprecipitation, Dot Blot, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4 kDa corresponding to Histone H3 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: 1:500

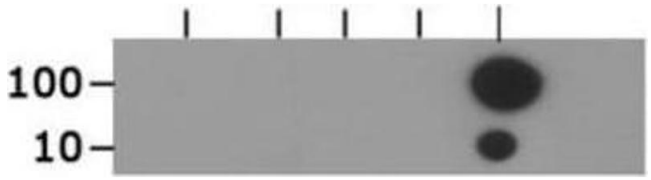
Application Details

	IF Microscopy Dilution: 1:500 Other: Dot Blot 1:1000
Restrictions:	For Research Use only

Handling

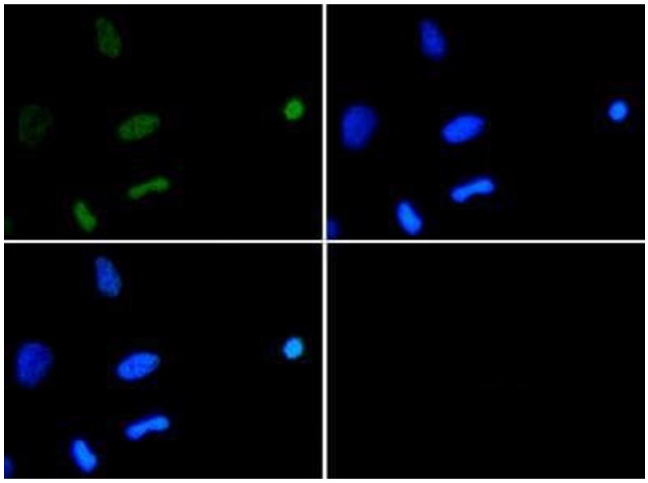
Format:	Liquid
Concentration:	1.1 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should 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

Images



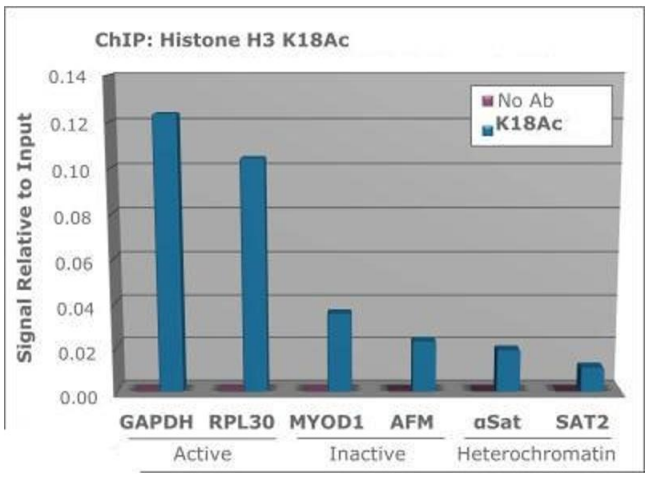
Dot Blot

Image 1. Dot Blot of Rabbit Histone H3 [ac Lys18] Antibody. Lane 1: unmodified. Lane 2: Me1. Lane 3: Me2. Lane 4: Me3. Lane 5: Ac. Load: 10 and 100 picomoles of peptide. Primary antibody: Histone H3 [ac Lys18] 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.



Fluorescence Microscopy

Image 2. Immunofluorescence of Rabbit Anti-Histone H3 [ac Lys18] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3[ac Lys18] antibody at a 1:500 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [ac Lys18] is nuclear and chromosomal. Staining: Histone H3 [ac Lys18] is expressed in green, nuclei are counterstained with DAPI (blue).



Chromatin Immunoprecipitation

Image 3. Chromatin Immunoprecipitation Rabbit Anti-Histone H3 [ac Lys18] Antibody. Chromatin from one million formaldehyde cross-linked Hela cells was used with 2 µg of Anti-Histone H3K18ac and 20 µL of magnetic IgG beads per immunoprecipitation. A no antibody (No Ab) control was also used. Immunoprecipitated DNA was quantified using quantitative real-time PCR and SYBR green dye, then normalized to the non-precipitated input chromatin, which is equal to one.

Please check the product details page for more images. Overall 4 images are available for ABIN5706753.