Datasheet for ABIN5706770

anti-Histone 3 antibody (H3K4ac)

5 Images

Go to Product page

Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K4ac
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), Multiplex Assay (MA), Fluorescence Microscopy (FM)

Product Details

Purpose:	Histone H3 K4ac Antibody
Immunogen:	Immunogen: Histone H3 [ac Lys4] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 4 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 Lys4 antibody, H3.3AH3F3H3F3B, H3.3B, H3 histone, family 3A, histone H3.3, MGC87783, MGC87782, H3K4ac

Product Details

Purification:	Anti-Histone H3 [ac Lys4] was affinity purified from monospecific antiserum by immunoaffinity chromatography.
Sterility:	Sterile filtered

Target Details

Target:	Histone 3 (H3)
Alternative Name:	Histone H3 (H3 Products)
Background:	Background: In transcription, H3K4Ac is prevalent at the promoters of active genes. Usually, this modification peaks in the cell cycle after dimethylation of H3K9 occurs, which indicates that there are sequential actions of these two modifications. Methylation that occurs on H3K4 concurrently with acetylation seems to act as an adjuster to the activation effects of acetylation. Shugoshin protein cannot bind to the centromere of active cells when H3K4 is acetylated, which reduces dimethylation, and thus slows meiosis and mitosis. Usually, H3K4Ac is a transitional modification, and will become further modified with methylation as transcription progresses, indicating complex transcriptional regulation. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.
Gene ID:	126961
NCBI Accession:	NP_001005464
UniProt:	Q71DI3

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:1000 Application Note: Anti-Histone H3 [ac Lys4] antibody is tested for Western Blot, Immunocytochemistry, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. 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 IF Microscopy Dilution: 1:1000 Other: Dot Blot 1:1000

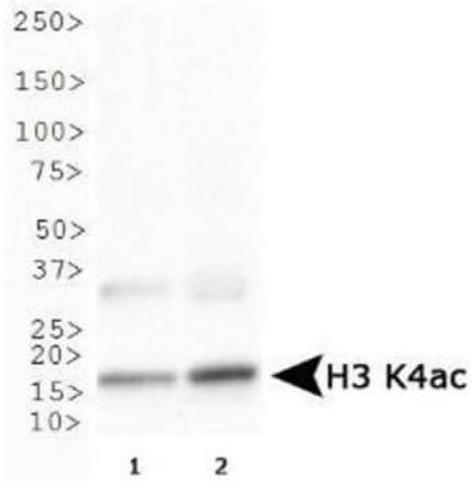
Application Details

Restrictions:	For Research Use only

Handling

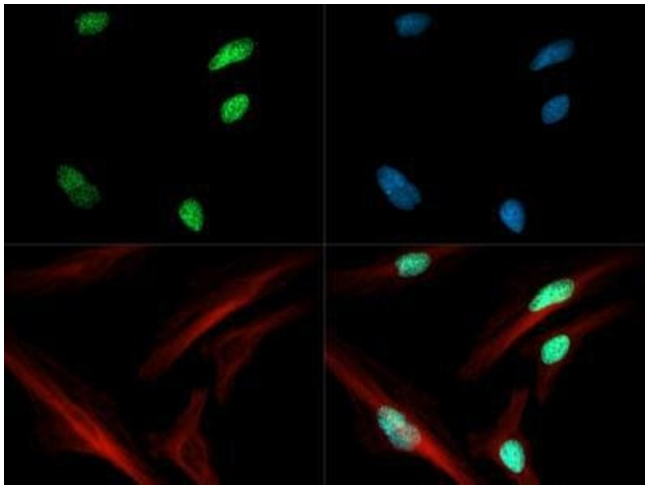
Format:	Liquid
Concentration:	0.68 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 30 % Glycerol Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which 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

Images



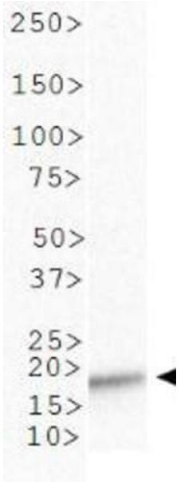
Western Blotting

Image 1. Western Blot of Rabbit Anti-Histone H3 [ac Lys4] Antibody. Lane 1: HeLa histone prep. Lane 2: NIH-3T3 prep lysates. Load: 30 µg per lane. Primary antibody: Histone H3 [ac Lys4] at 1:500 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: ~15 kDa. Other band(s): None.



Fluorescence Microscopy

Image 2. Immunofluorescence of Rabbit Anti-Histone H3 [ac Lys4] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [ac Lys4] antibody at a 1:50 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 Lys4] is nuclear and chromosomal. Staining: Histone H3 [ac Lys4] is expressed in green and the nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 566 (red).



Western Blotting

Image 3. Western Blot of Rabbit Anti-Histone H3 [ac Lys4] Antibody. Lane 1: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [ac Lys4] at 1:500 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: ~15-16 kDa. Other band(s): None.

Please check the product details page for more images. Overall 5 images are available for ABIN5706770.