Datasheet for ABIN5706782

anti-Histone 3 antibody (H3K9ac, H3K14ac)

5 Images

Go to Product page

Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K9ac, H3K14ac
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 K9ac/K14ac Antibody
Immunogen:	Immunogen: Histone H3 [ac Lys9, ac Lys14] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysines 9 and 14 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 Lys9 / Ac Lys14 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3K9ac/K14ac

Product Details

Purification:	Anti-Histone H3 [ac Lys9, ac Lys14] 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: Acetylation at K9 and K14 of histone H3 is known to be an epigenetic modification associated with active transcription. Under cellular stress conditions, H3K9ac/K14ac levels increase, probably due to the inactivation of the HDA6 histone deacetylase. Particularly, during infections with herpes simplex virus, the acute phase of the infection is demarcated by increased presence of H3K9ac/K14ac associated with transcriptionally active euchromatin. The virus seems to take advantage of the highly transcribed regions of euchromatin for viral replication, increasing the lytic infection. 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: 1:200 Application Note: Anti-Histone H3 [ac Lys9, ac Lys14] antibody is tested for Western Blot, Dot Blot, and Immunofluorescence. This antibody is useful for Chromatin Immunoprecipitation and Immunocytochemistry. 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: 1:200 Other: Dot Blot 1 µg/mL

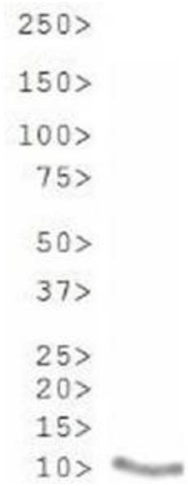
Application Details

Restrictions:	For Research Use only

Handling

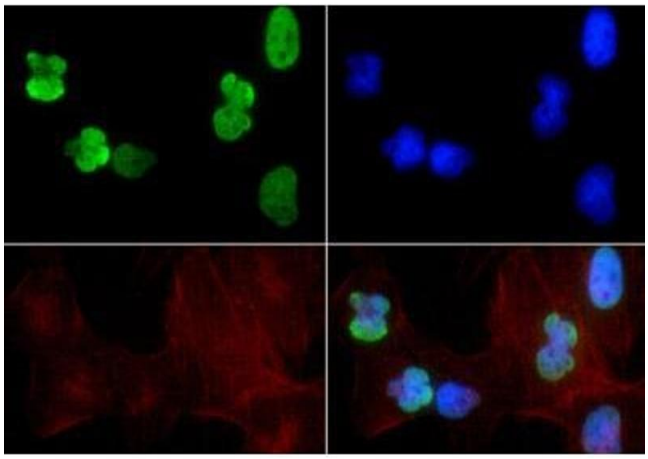
Format:	Liquid
Concentration:	0.63 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 30 % Glycerol Preservative: 0.05 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which 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



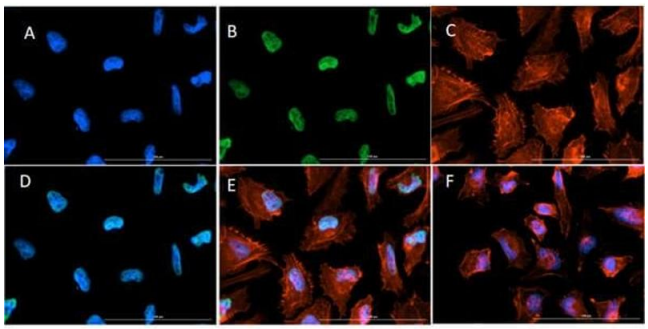
Western Blotting

Image 1. Western Blot of Rabbit Anti-Histone H3 [ac Lys9, ac Lys14] Antibody. Lane 1: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [ac Lys9, ac Lys14] 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 Lys9, ac Lys14] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [ac Lys9, ac Lys14] antibody at a 1:200 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [ac Lys9, ac Lys14] is nuclear and chromosomal. Staining: Histone H3 [ac Lys9, ac Lys14] is expressed in green, nuclei and actin are counterstained with Dapi (blue) and Phalloidin (red).



Fluorescence Microscopy

Image 3. ImmunoFluorescence of Rabbit Anti-Histone H3 K9ac/K14ac Antibody. Cells: HeLa Cells. Fixation: 4 % PFA. Permeabilization: 0.3 % Triton X-100. Primary Antibody: Anti-Histone H3 [ac Lys9, ac Lys14] at 5 µg/mL overnight at 2-8 °C. Secondary Antibody: Goat Anti-Rabbit IgG DyLight™488 (p/n 611-141-122) at 5 µg/mL for 1hr at RT. Nuclear Counterstain: DAPI. Actin Filament Stain: Texas Red - X Phallodin. Staining: (A) DAPI. (B) K9 AC/K14 AC + DyLight™488. (C) Actin-X Phallodin. (D) Merge A+B. (E) Merge A+B+C. (F) Secondary Only Merge. Expected Location: Nuclear and Chromosomal.

Please check the product details page for more images. Overall 5 images are available for ABIN5706782.