Datasheet for ABIN5706781

anti-Histone 3 antibody (H3K9ac)

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Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K9ac
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 K9ac Antibody
Immunogen:	Immunogen: Histone H3 [ac Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 9 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 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3K9ac
Purification:	Anti-Histone H3 [ac Lys9] was affinity purified from monospecific antiserum by immunoaffinity

Product Details

	chromatography.
Sterility:	Sterile filtered

Target Details

Target:	Histone 3 (H3)
Alternative Name:	Histone H3 (H3 Products)
Background:	Background: Acetylation of histone H3 at the K9 residue is associated with chromosome condensation in mitotic cells. The presence of H3K9ac is correlated to H3K4 trimethylation, and their distribution is related to developmentally repressed genes in some species. It has been shown that neuron depolarization promotes intragenic histone acetylation leading toward the formation of this modification. In pituitary, dopamine receptor agonists lead toward apoptosis. However, in tumors, decreased availability and activity of these agonists, combined with decreased H3K9ac leads toward resistance to chemotherapies and cancer survival and proliferation. Nuclear receptor PPAR ' induces the enrichment of H3K9ac enrichment on downstream promoters, which has effects on transcription and ultimately nuclear receptor transactivation. 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: 1:100 Application Note: Anti-Histone H3 [ac Lys9] 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 IF Microscopy Dilution: 1:100 Other: Dot Blot 1:1000

Application Details

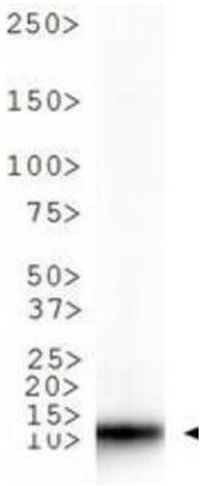
Restrictions:	For Research Use only

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

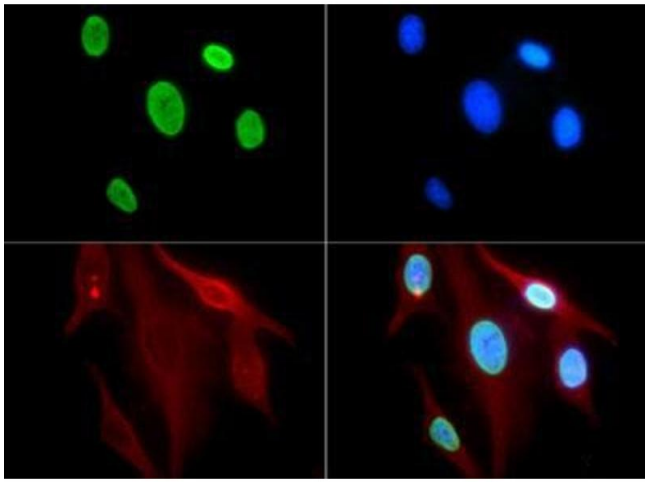
Publications

Product cited in:	Moiseeva, Hood, Schamus, OConnor, Conrads, Bakkenist: "ATR kinase inhibition induces unscheduled origin firing through a Cdc7-dependent association between GINS and And-1." in: **Nature communications**, Vol. 8, Issue 1, pp. 1392, (2018) (PubMed).



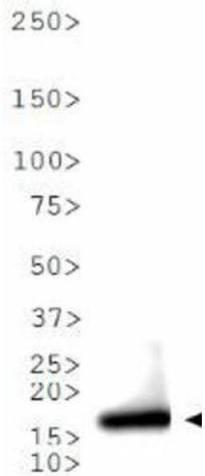
Western Blotting

Image 1. Western Blot of Rabbit Anti-Histone H3 [ac Lys9] Antibody. Lane 1: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [ac Lys9] 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] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [ac Lys9] 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 H3 [ac Lys9] is nuclear and chromosomal. Staining: Histone H3 [ac Lys9] is expressed in green.



Western Blotting

Image 3. Western Blot of Rabbit Anti-Histone H3 [ac Lys9] Antibody. Lane 1: HeLa histone preps. Load: 30 µg per lane. Primary antibody: Histone H3 [ac Lys9] 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.

Please check the product details page for more images. Overall 6 images are available for ABIN5706781.