Datasheet for ABIN5706784

anti-Histone 3 antibody (H3K9me, pThr6)

6 Images

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Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K9me, pThr6
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 K9me1/phospho T6 Antibody
Immunogen:	Immunogen: Histone H3 [p Thr6, Monomethyl Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated/phosphorylated peptide surrounding Lysine 9/Threonine 6 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 pT6 monomethyl Lys9 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3K9me1/pT6

Product Details

Purification:	Anti-Histone H3 [p Thr6, Monomethyl Lys9] 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: Methylation of Histone H3 at Lys9 (K9) is an epigenetic silencer of transcription. Gene silencing from histone post translational modifications, as well as DNA methylation, play a key role in the development of normal tissues. If this silencing is disturbed through the artificial silencing of RIZ1, and thereby H3 K9Me1, it has been shown that normal apoptotic processes in precancerous cells can be reduced. Interestingly, data indicates that the conversion of the monomethyl to the trimethyl form requires mediation by SUVR4 in transposons and pseudogenes. Research also indicates that the presence of the G9a/GLP heterodimeric complex is required for this modification to exist. The additional phosphorylation at Thr6 (pT6) affects the ability of other proteins to bind to the H3 tail, along with amplifying the effects of other histone PTMs that are present. Because T6 phosphorylation is constitutive, its dephosphorylation may play a key role in DNA transcription, repair and replication. 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 [p Thr6, Monomethyl Lys9] 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

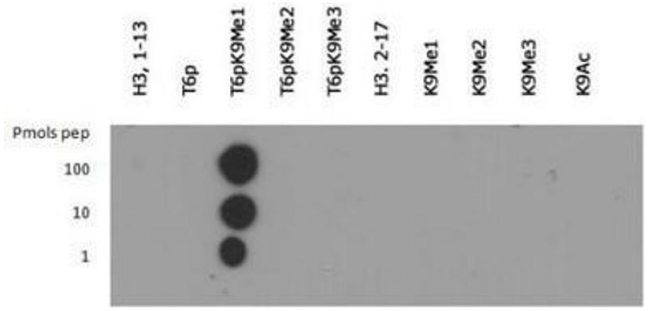
Application Details

	Western Blot Dilution: 1:500-1:1000 IF Microscopy Dilution: 1:200 Other: Dot Blot 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.85 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

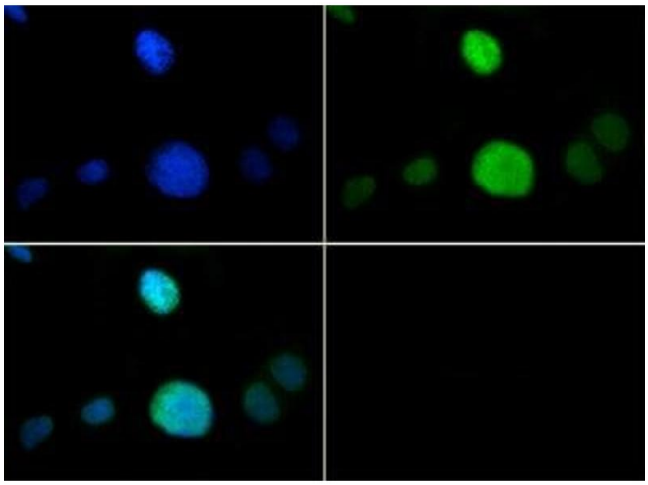
Images



Dot Blot

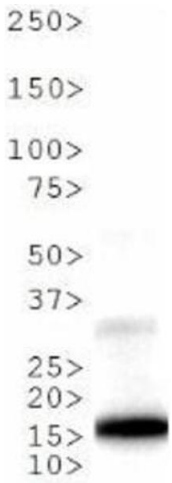
Image 1. Dot Blot of Rabbit Histone H3 [Monomethyl Lys9, p Thr6] Antibody. Lane 1: Histone H3 1-13. Lane 2: T6p. Lane 3: T6pK9Me1. Lane 4: T6pK9Me2. Lane 5: T6pK9Me3. Lane 6: Histone H3 2-17. Lane 7: K9Me1. Lane 8: K9Me2. Lane 9: K9Me3. Lane 10: K9Ac. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H3 [Monomethyl Lys9, p Thr6] 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 [p Thr6, Monomethyl Lys9] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [p Thr6, Monomethyl Lys9] 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 H3 [p Thr6, Monomethyl Lys9] is nuclear and chromosomal. Staining: Histone H3 [p Thr6, Monomethyl Lys9] is expressed in green and the nuclei are counterstained with DAPI (blue).



Western Blotting

Image 3. Western Blot of Rabbit Anti-Histone H3 [Monomethyl Lys9, p Thr6] Antibody. Lane 1: NIH-3T3 Histone prep lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [Monomethyl Lys9, p Thr6] 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: ~15 kDa. Other band(s): None.

Please check the product details page for more images. Overall 6 images are available for ABIN5706784.