Datasheet for ABIN5706775

anti-Histone 3 antibody (H3K4me3, pThr6)

5 Images

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Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K4me3, pThr6
Reactivity:	Human, 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 K4me3/phospho T6 Antibody
Immunogen:	Immunogen: Histone H3 [Trimethyl Lys4, p Thr6] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with synthetic trimethylated/phosphorylated peptides surrounding Lysine 4 and 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 trimethyl Lys4 pT6 antibody, H3.3B, H3.3AH3F3H3F3B, H3

Product Details

	histone, family 3A, histone H3.3, MGC87783, MGC87782, H3K4me3/pT6
Purification:	Anti-Histone H3 [Trimethyl Lys4, p Thr6] 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: Phosphorylation at T6 of methylated H3K4 prevents LSD1 from demethylating histone H3. Androgen receptor activated gene expression depends upon removal of methyl groups from H3K4, in cooperation with the Jumonji protein JMJD2C. However, when T6 is phosphorylated, there is a physical obstruction in the way of demethylation, and thus gene expression is repressed. The PHD finger of H3K4 seems to be an effector of histone modification, which can cause dysfunction in cellular fate regulation. Interestingly, the abundance of phosphorylation of this modified histone is a probable biomarker for the detection and the prognosis of certain cancers. 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: 1:50 Application Note: Anti-Histone H3 [Trimethyl Lys4, p Thr6] 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

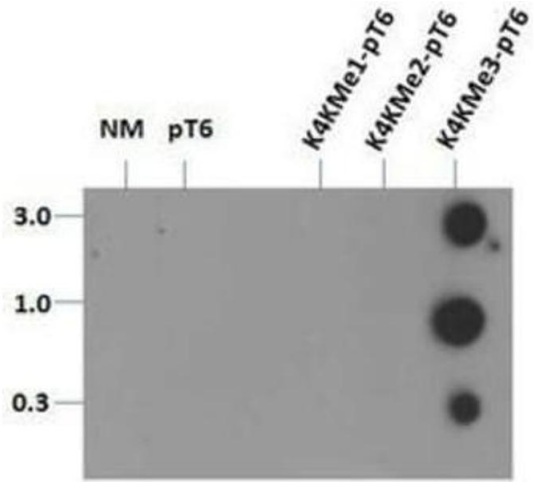
Application Details

	IF Microscopy Dilution: 1:50 Other: Dot Blot 0.5 µg/mL
Restrictions:	For Research Use only

Handling

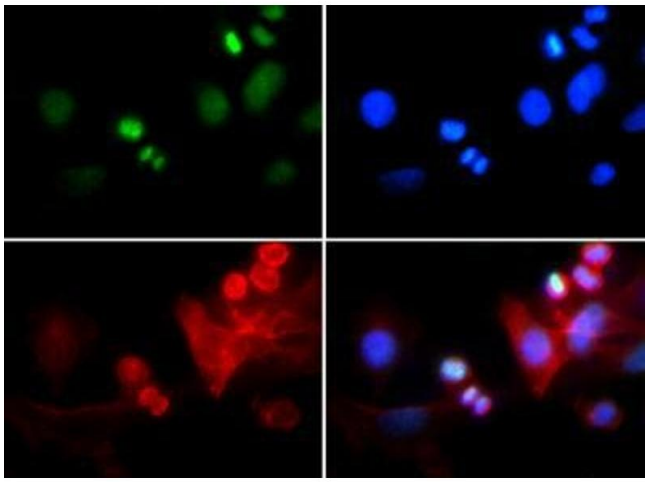
Format:	Liquid
Concentration:	0.68 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 30 % Glycerol Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which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



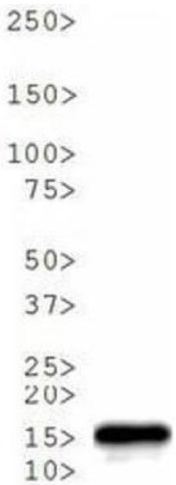
Dot Blot

Image 1. Dot Blot of Rabbit Histone H3 [Trimethyl Lys4, p Thr6] Antibody. Lane 1: Unmodified. Lane 2: pT6. Lane 3: K4Me1pT6. Lane 4: K4Me2pT6. Lane 5: K4Me3pT6. Load: 3, 1, and 0.3 picomoles of peptide. Primary antibody: Histone H3 [Trimethyl Lys4, 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 [Trimethyl Lys4, p Thr6] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Trimethyl Lys4, p Thr6] 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 [Trimethyl Lys4, p Thr6] is nuclear and chromosomal. Staining: Histone H3 [Trimethyl Lys4, p Thr6] is expressed in green and the nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 594 (red).



Western Blotting

Image 3. Western Blot of Rabbit Anti-Histone H3 [Trimethyl Lys4, p Thr6] Antibody. Lane 1: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [Trimethyl Lys4, p Thr6] 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 5 images are available for ABIN5706775.