

Datasheet for ABIN5706771
anti-Histone 3 antibody (H3K4me2)



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5 Images

Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K4me2
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), Fluorescence Microscopy (FM)

Product Details

Purpose:	Histone H3 K4me2 Antibody
Immunogen:	Immunogen: Histone H3 [Dimethyl Lys4] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic dimethylated 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 dimethyl Lys4 antibody, H3.3B, H3.3AH3F3H3F3B, H3 histone, family 3A, histone H3.3, MGC87783, MGC87782, H3K4me2
Purification:	Anti-Histone H3 [Dimethyl Lys4] was affinity purified from monospecific antiserum by

Product Details

immunoaffinity chromatography.

Sterility: Sterile filtered

Target Details

Target: Histone 3 (H3)

Alternative Name: Histone H3 ([H3 Products](#))

Background: Background: H3K4me2 is a modification thought to have a role in transcriptional memory. In CD4+ T lymphocytes, H3K4Me2 is present within gene bodies regulating cellular function, but not in those of housekeeping genes, which indicates that the modification has a role in refining the tissue-specificity of expressed genes. This type of cellular identity targeting is also noted in work with human and mouse spermatozoa, the H3K4Me2 modification marks genes that are relevant in spermatogenesis. Most effects of H3K4Me2 seem to be attributed to its transcriptional activation, however, recent work also indicates that it may also play an RNA-dependent regressive role, related to the GAL-1 promoter. 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 [Dimethyl Lys4] antibody is tested in Western Blot, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. This antibody is useful in 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

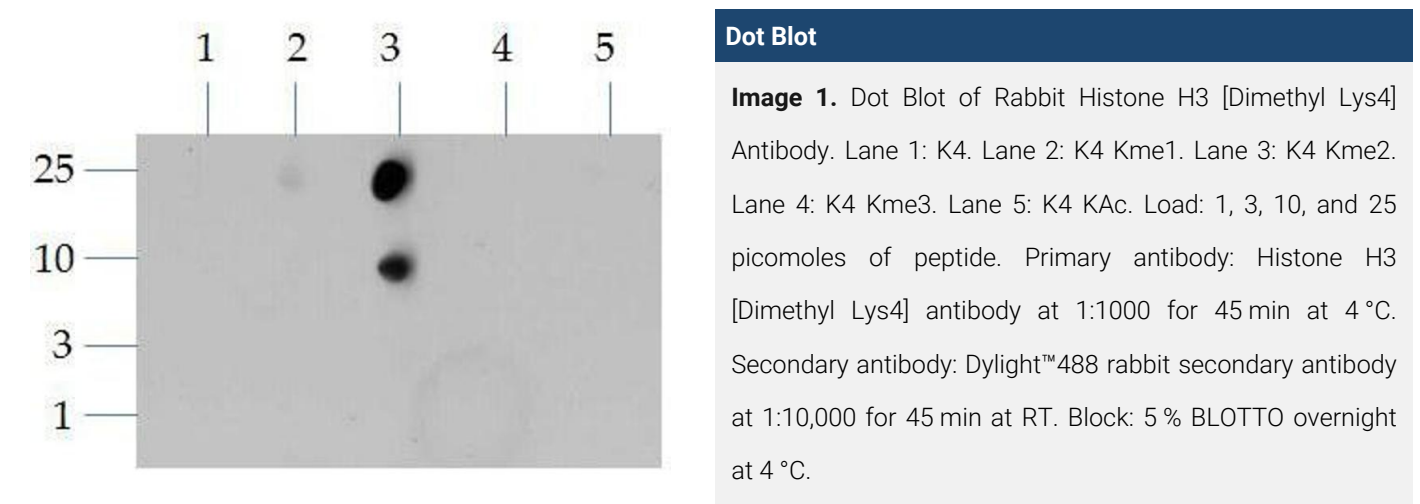
IF Microscopy Dilution: 1:50

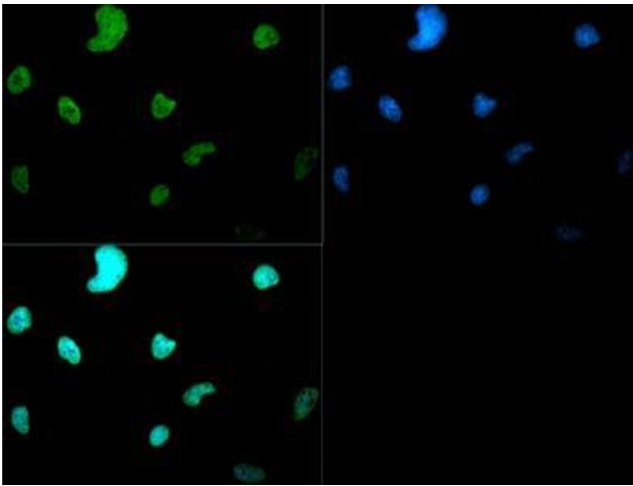
Other: Dot Blot 1:1000

Application Details

Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1.1 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

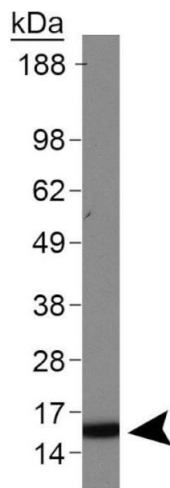
Images





Fluorescence Microscopy

Image 2. Immunofluorescence of Rabbit Anti-Histone H3 [Dimethyl Lys4] Antibody. Tissue: *C. elegans* embryo lysate. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Dimethyl 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 [Dimethyl Lys4] is nuclear and chromosomal. Staining: Histone H3 [Dimethyl Lys4] is expressed in green and the nuclei are counterstained blue with DAPI.



Western Blotting

Image 3. Western Blot of Rabbit Anti-Histone H3 [Dimethyl Lys4] Antibody. Lane 1: HeLa histone preps. Load: 30 µg per lane. Primary antibody: Histone H3 [Dimethyl Lys4] 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 5 images are available for ABIN5706771.