Datasheet for ABIN5706779

anti-Histone 3 antibody (H3K79me3)

4 Images

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Overview

Quantity:	50 µg
Target:	Histone 3 (H3)
Binding Specificity:	H3K79me3
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 K79me3 Antibody
Immunogen:	Immunogen: Histone H3 [Trimethyl Lys79] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic trimethylated peptide surrounding Lysine 79 of human Histone H3. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This antibody reacts with human Histone H3.
Characteristics:	Synonyms: rabbit anti-Histone H3 trimethyl Lys79 antibody, H3.3B, H3K27Me3, H3K79Me3, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782

Product Details

Purification:	Anti-Histone H3 [Trimethyl Lys79] 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: Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fibre is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. Covalent modifications of the canonical core histones, including acetylation, phosphorylation, methylation, and monoubiquitination are used to mark nucleosomes to create chromatin domains with a range of functions. The information encoded by histone modifications can contribute to the formation and/or maintenance of transcriptionally active and inactive chromatin in response to various signalling pathways. Anti-Histone H3 are ideal for researchers interested in Chromatin Research, Epigenetics, Chromatin Modifiers, Histones and Modified Histones, and Phospho Specific research.
Gene ID:	126961
NCBI Accession:	NP_001005464
UniProt:	Q71DI3

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:100-1:1000 Application Note: Anti-Histone H3 [Trimethyl Lys79] antibody is tested in Western Blot, Dot Blot, Chromatin Immunoprecipitation, and Immunofluorescence. This antibody is useful for 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 µg/mL

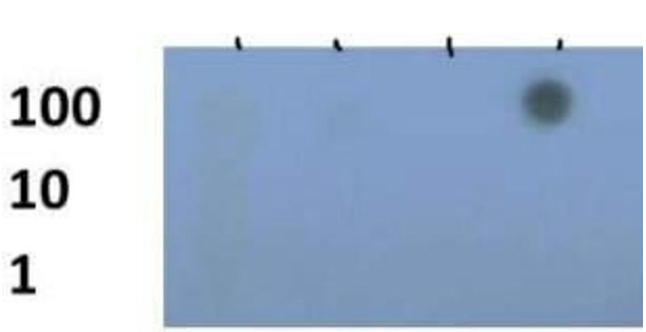
Application Details

	IF Microscopy Dilution: 1:100-1:1000 Other: user optimized
Restrictions:	For Research Use only

Handling

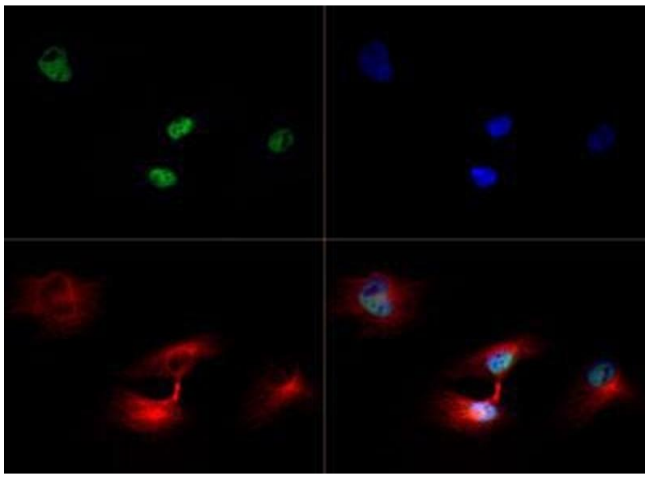
Format:	Liquid
Concentration:	0.6 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 30 % Glycerol Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which 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



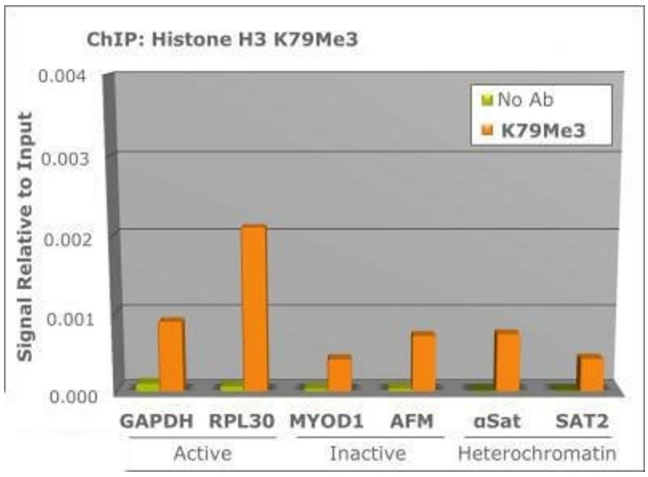
Dot Blot

Image 1. Dot Blot of Rabbit Histone H3 [Trimethyl Lys79] Antibody. Lane 1: K79 unmodified. Lane 2: K79me1. Lane 3: K79me2. Lane 4: K79me3. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H3 [Trimethyl Lys79] 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 Lys79] Antibody. Tissue: HeLa cells during prophase. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Trimethyl Lys79] antibody at a 1:100 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [Trimethyl Lys79] is nuclear and chromosomal. Staining: Histone H3 [Trimethyl Lys79] is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 550 (red).



Chromatin Immunoprecipitation

Image 3. Chromatin Immunoprecipitation of Rabbit Anti-Histone H3 [Trimethyl Lys79] Antibody. Chromatin from one million formaldehyde cross-linked HeLa cells was used with 2 µg of Anti-Histone H3 K27me3 and 20 µL of magnetic IgG beads per immunoprecipitation. A no antibody (No Ab) control was also used. Immunoprecipitated DNA was quantified using quantitative real-time PCR and SYBR green dye, then normalized to the non-precipitated input chromatin, which is equal to one.

Please check the product details page for more images. Overall 4 images are available for ABIN5706779.