Datasheet for ABIN5706783

# anti-Histone 3 antibody (H3K9me)

5 Images

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## Overview

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|---|---|
| Quantity: | 50 µg |
| Target: | Histone 3 (H3) |
| Binding Specificity: | H3K9me |
| 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), Multiplex Assay (MA), Fluorescence Microscopy (FM) |

## Product Details

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| Purpose: | Histone H3 K9me1 Antibody |
| Immunogen: | Immunogen: Histone H3 [Monomethyl Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated peptide surrounding Lysine 9 of human Histone H3.2.<br>Immunogen Type: Conjugated Peptide |
| Isotype: | IgG |
| Cross-Reactivity (Details): | This antibody reacts with human Histone H3. |
| Characteristics: | Synonyms: rabbit anti-Histone H3 monomethyl Lys9 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3K9me1 |

## Product Details

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| Purification: | Anti-Histone H3 [Monomethyl Lys9] was affinity purified from monospecific antiserum by immunoaffinity chromatography. |
| Sterility: | Sterile filtered |

## Target Details

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| Target: | Histone 3 (H3) |
| Alternative Name: | Histone H3 (H3 Products) |
| Background: | Background: Histone H3 K9 methylation is a conserved epigenetic silencer of transcription. However, for this modification to make its effect, the G9a/GLP heteromeric complex is required to methylate histone H3. Throughout development of normal tissues, DNA methylation and stable gene silencing is required to optimize cellular development. Likewise, in cancer, dysfunctions in these normal functions are required to enhance cellular proliferation. When K3K9 me1 silences the expression of RIZ1, normal apoptosis of pre-cancerous cells does not occur, and proliferation goes ahead unabated. From H3K9me1, conversion to H3K9me3 is mediated by SUVR4, at transposons and pseudogenes. 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

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| Application Notes: | Immunohistochemistry Dilution: 1:500<br>Application Note: Anti-Histone H3 [Monomethyl Lys9] antibody is tested for Western Blot, Chromatin Immunoprecipitation, Dot Blot, and Immunocytochemistry/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.<br>ChIP Dilution: 2-5 µg/million cells<br>Western Blot Dilution: 1:500<br>IF Microscopy Dilution: 1:500<br>Other: Dot Blot 0.5 µg/mL |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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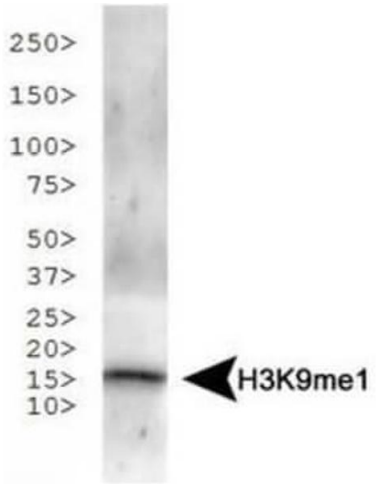
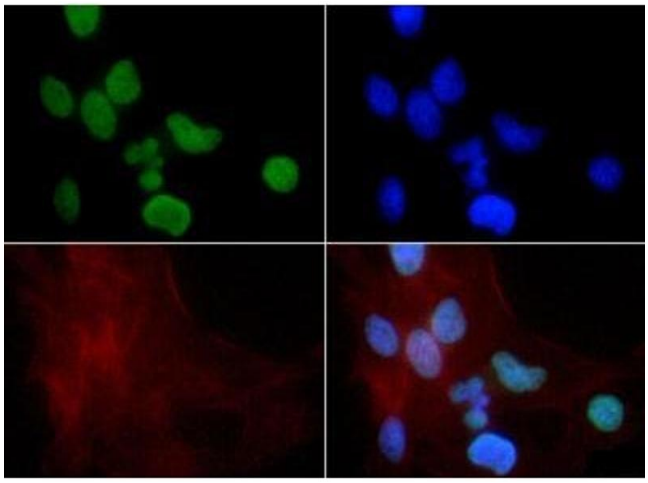
|---|---|
| Format: | Liquid |
| Concentration: | 0.7 mg/mL |
| Buffer: | Optional[Buffer]: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Preservative: 0.01 % (w/v) Sodium Azide |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND 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



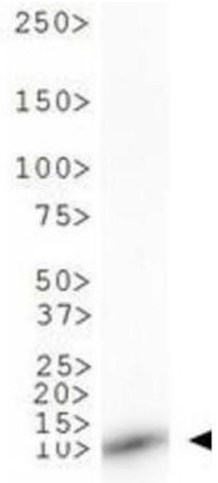

**Western Blotting**

**Image 1.** Western Blot of Rabbit Anti-Histone H3 [Monomethyl Lys9] Antibody. Lane 1: NIH-3T3 histone preps. Load: 30 µg per lane. Primary antibody: Histone H3 [Monomethyl 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 [Monomethyl Lys9] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [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 [Monomethyl Lys9] is nuclear and chromosomal. Staining: Histone H3 [Monomethyl Lys9] is expressed in green and the nuclei and actin are counterstained with DAPI (blue) and Phalloidin (red).




## Western Blotting

**Image 3.** Western Blot of Rabbit Anti-Histone H3 [Monomethyl Lys9] Antibody. Lane 1: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [Monomethyl 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 5 images are available for ABIN5706783.