

## Datasheet for ABIN5706754 anti-Histone 3 antibody (H3K18me)





#### Overview

Quantity:	50 μg	
Target:	Histone 3 (H3)	
Binding Specificity:	H3K18me	
Reactivity:	Human, Mouse	
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 K18me1 Antibody
Immunogen:	Immunogen: Histone H3 [Monomethyl Lys18] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated peptide surrounding Lysine 18 of human Histone H3.2.  Immunogen Type: Conjugated Peptide
	inimunogen Type. Conjugated Feptide
Isotype:	IgG
Cross-Reactivity (Details):	This antibody reacts with human Histone H3.
Characteristics:	Synonyms: rabbit anti-Histone H3 monomethyl Lys18 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3K18me1

# Product Details Purification:

Anti-Histone H3 [Monomethyl Lys18] 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: Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational modifications work together to activate or repress the availability of DNA to be copied, transcribed, or repaired. These marks decide which DNA will be open and commonly active (euchromatin) or tightly wound to prevent access and activation (heterochromatin). Common histone modifications include methylation of lysine and arginine, acetylation of lysine, phosphorylation of threonine and serine, and sumoylation, biotinylation, and ubiquitylation of lysine. 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: 1:100

Application Note: Anti-Histone H3 [Monomethyl Lys18] antibody is tested in for Western Blot, Dot Blot, and Immunofluorescence. This antibody is useful for Chromatin Immunoprecipitation and 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.

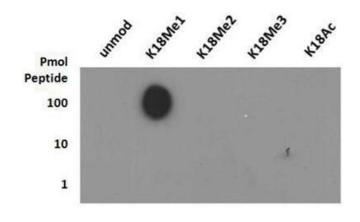
ChIP Dilution: 2-5  $\mu$ g/million cells

Western Blot Dilution: 1:500

IF Microscopy Dilution: 1:100

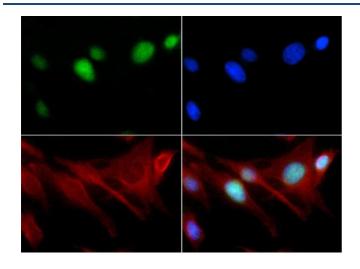
### **Application Details**

	Other: Dot Blot 1:1000	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Concentration:	0.64 mg/mL	
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None 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 Lys18] Antibody. Lane 1: unmodified. Lane 2: K18Me1. Lane 3: K18Me2. Lane 4: K18Me3. Lane 5: K18ac. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H3 [Monomethyl Lys18] 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. Immunocytochemistry of Rabbit Anti-Histone H3 [Monomethyl Lys18] Antibody. Tissue: HeLa cells. Fixation: 0.5 % PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Monomethyl Lys18] 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 Lys18] is nuclear and chromosomal. Staining: Histone H3 [Monomethyl Lys18] is expressed in green, nuclei and actin are counterstained with DAPI (blue) and Phalloidin (red).

2	50	>
1	50	>
1	00	>
	75	>
	50	>
	37	>
	25	75.
	15 10	

#### **Western Blotting**

Image 3. Western Blot of Rabbit Anti-Histone H3 [Monomethyl Lys18] Antibody. Lane 1: NIH-3T3 histone prep cell lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [Monomethyl Lys18] 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 4 images are available for ABIN5706754.