

# Datasheet for ABIN5706766 anti-Histone 3 antibody (H3K37me)





## Overview

Quantity:	50 μg
Target:	Histone 3 (H3)
Binding Specificity:	H3K37me
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**

Purpose:	Histone H3 K37me1 Antibody
Immunogen:	Immunogen: Histone H3 [Monomethyl Lys37] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic methylated peptide surrounding Lysine 37 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 monomethyl Lys37 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87782, MGC87783, H3K37me1

# **Product Details** Purification: Anti-Histone H3 [Monomethyl Lys37] was affinity purified from monospecific antiserum by immunoaffinity chromatography. Sterility: Sterile filtered **Target Details** Histone 3 (H3) Target: Histone H3 (H3 Products) Alternative Name: 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 Research, Epigenetics, Chromatin Modifiers, Histones and Modified Histones research. Gene ID: 126961 NCBI Accession: NP\_001005464 UniProt: Q71DI3 **Application Details** Application Notes: Immunohistochemistry Dilution: not recommended

Application Note: Anti-Histone H3 [Monomethyl Lys37] antibody is tested for Bot Blot, Western Blot, and 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. Anti-Histone H3 is also useful for Dot Blot. Epi-Plus™ antibody production in collaboration with Novus Biologicals.

ChIP Dilution: not recommended

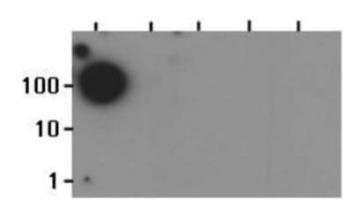
Western Blot Dilution: 1 µg/mL

IF Microscopy Dilution: not recommended

# **Application Details**

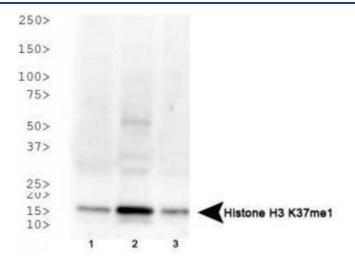
	Other: Dot Blot 1:1000
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 30 % Glycerol Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This 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	

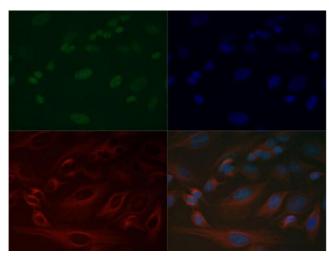
#### **Images**



### **Dot Blot**

Image 1. Dot Blot of Rabbit Histone H3 [Monomethyl Lys37] Antibody. Lane 1: K37me1. Lane 2: K36me1. Lane 3: K36me2. Lane 4: K36me3. Lane 5: K36ac. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H3 [Monomethyl Lys37] 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.





### **Western Blotting**

Image 2. Western Blot of Rabbit Anti-Histone H3 [Monomethyl Lys37] Antibody. Lane 1: HeLa histone prep. Lane 2: NIH-3T3 histone prep. Lane 3: C. elegans embryo lysate. Load: 30 μg per lane. Primary antibody: Histone H3 [Methyl Lys37] at 1 μg/mL 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 3.** Immunofluorescence of Anti-Histone H3 K37 me1: Histone H3 monomethyl Lys37 antibody was tested at 1:200 in HeLa cells with FITC (green). Cells and nuclei were counterstained with DAPI (blue) and DyLight 550 (red). (40X)

Please check the product details page for more images. Overall 4 images are available for ABIN5706766.