

Datasheet for ABIN6972043

anti-Histone 3 antibody (3meLys9)**4** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Histone 3 (H3)
Binding Specificity:	3meLys9
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Dot Blot (DB), Immunocytochemistry (ICC), Cleavage Under Targets and Tagmentation (CUT&Tag)

Product Details

Immunogen:	This Histone H3 trimethyl Lys9 antibody was raised against a peptide including trimethyl-lysine 9 of histone H3.
Isotype:	IgG
Characteristics:	<p>Histone H3 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points. Histone H1 is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation,</p>

Product Details

ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation, these modifications play a major role in regulating gene expression. The methylation of histones can occur on two different residues: arginine or lysine. Histone methylation can be associated with transcriptional activation or repression, depending on the methylated residue. Lysine 9 of histone H3 can be mono-, di- or trimethylated by different histone methyltransferases (HMTs) such as SuvH39H1 or G9a. This methylated lysine can be demethylated by histone demethylases as JMJD1A, LSD1 or JMJD2C. Methylation of this residue is mainly associated with transcriptional repression. Histone H3K9me3 antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, CUT&Tag, Dot blot, Immunocytochemistry, Immunofluorescence and Western blot, it has been shown to react with Human samples, but it is predicted that it will react with a wide range of sample types.

Purification:	Protein A Chromatography
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Target Details

Target:	Histone 3 (H3)
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Alternative Name:	Histone H3 (H3 Products)
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Molecular Weight:	17 kDa
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NCBI Accession:	NP_003522
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Application Details

Application Notes:	Recommended antibody dilutions for different applications: ChIP: 10 µg for each ChIP ICC/IF: 1 µg/mL dilution WB: 0.5 - 2 µg/mL dilution CUT&Tag: 1 µg for each 50 µL reaction Optimal working dilution should be determined by the investigator.
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Restrictions:	For Research Use only
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Handling

Buffer:	Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.
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Preservative:	Sodium azide
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Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which
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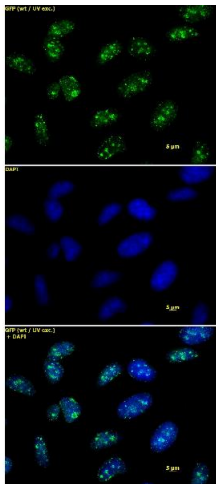
Handling

should be handled by trained staff only.

Storage: -20 °C

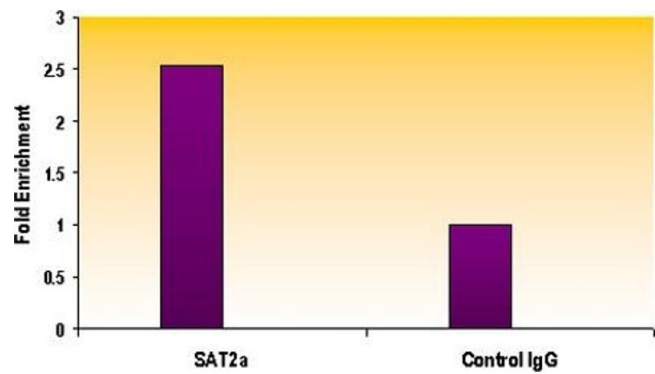
Storage Comment: Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.

Images



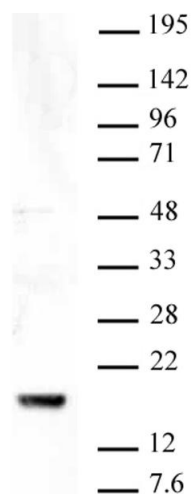
Immunofluorescence

Image 1. Histone H3 trimethyl Lys9 antibody tested by immunofluorescence. Detection of Histone H3 trimethyl Lys9 by immunofluorescence. HeLa cells were stained with Histone H3 trimethyl Lys9 antibody at a dilution of 1 µg/mL. Top panel: Histone H3 trimethyl Lys9 antibody staining. Middle panel: DAPI. Bottom panel: merge.



Chromatin Immunoprecipitation

Image 2. Histone H3 trimethyl Lys9 antibody tested by ChIP analysis. Chromatin IP performed using the ChIP-IT Express Kit and HeLa Chromatin (1.5 x 10⁶ cell equivalents per ChIP) using 10 µg of Histone H3 trimethyl Lys9 pAb or the equivalent amount of rabbit IgG as a negative control. Real time, quantitative PCR (RT-qPCR) was performed on DNA purified from each of the ChIP reactions using a primer pair specific for the indicated gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.



Western Blotting

Image 3. Histone H3K9me3 antibody (pAb) tested by Western blot. HeLa nuclear extract (20 µg) was probed with Histone H3K9me3 antibody (2 µg/mL dilution).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6972043.