

Datasheet for ABIN6971937

anti-Histone 3 antibody (3meLys36)



[Go to Product page](#)

4 Images

Overview

Quantity:	100 µg
Target:	Histone 3 (H3)
Binding Specificity:	3meLys36
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Immunocytochemistry (ICC), Dot Blot (DB), ChIP DNA-Sequencing (ChIP-seq), Cleavage Under Targets and Release Using Nuclease (CUT&RUN)

Product Details

Immunogen:	This Histone H3 trimethyl Lys36 antibody was raised against a peptide containing trimethyl Lys36 of human histone H3.
Isotype:	IgG
Characteristics:	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). 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, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation, these

Product Details

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. Histone H3 is methylated at lysine 36 by the Set2 (yeast) and NSD1 (mammals) methyltransferases. Dimethylation of lysine 36 of histone H3 is involved with transcriptional elongation by RNA pol II holoenzyme and is a marker of transcribed genes. Histone H3K36me3 antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, CUT&Tag, Dot blot and Western blot, it has been shown to react with Human and Mouse samples, but it is predicted that it will react with a wide range of sample types.

Purification: Protein A Chromatography

Target Details

Target: Histone 3 (H3)

Alternative Name: Histone H3 ([H3 Products](#))

Molecular Weight: 17 kDa

NCBI Accession: [NP_003522](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

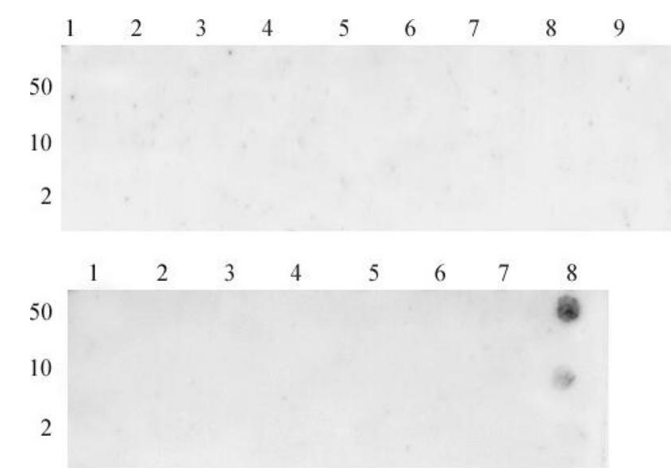
Buffer: Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.

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: -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.

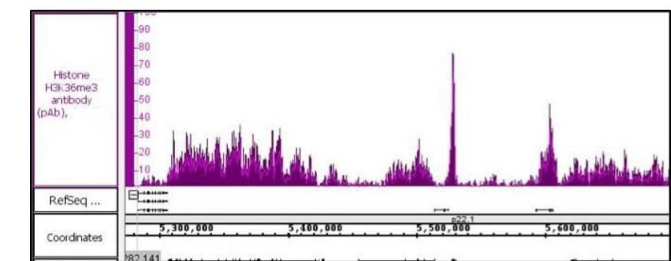


Dot Blot

Image 1. Dot blot specificity analysis of Histone H3K26me3 pAb: Dot blot analysis was used to confirm the specificity of Histone H3K36me3 antibody for trimethyl-lysine 36 of histone H3. Peptides corresponding to regions around major sites of histone H3 methylation were spotted onto PVDF and probed with the antibody at a dilution of 1 µg/mL. The amount of peptide (in picomoles) spotted is indicated next to each row. Top panel - Lane 1: unmodified Lys4. Lane 2: K4me1. Lane 3: K4me1. Lane 4: K4me2. Lane 5: K4me3. Lane 6: unmodified Lys9. Lane 7: K9me1. Lane 8: K9me2. Lane 9: K9me3. Lower panel - Lane 1: unmodified Lys27. Lane 2: K27me1. Lane 3: K27me2. Lane 4: K27me3. Lane 5: unmodified Lys36. Lane 6: K36me1. Lane 7: K36me2. Lane 8: K36me3.

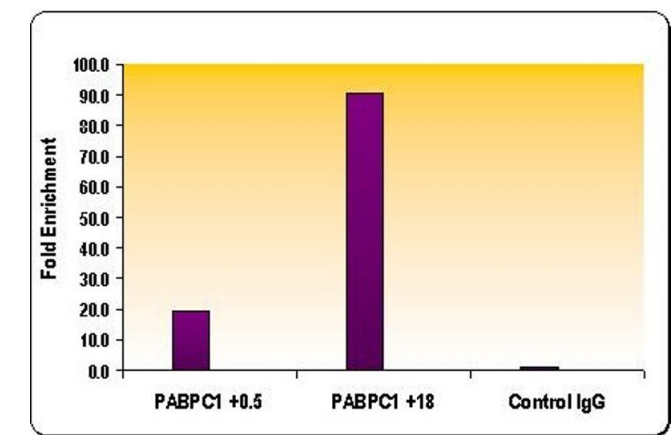
ChIP DNA-Sequencing

Image 2. Histone H3K36me3 antibody (pAb) tested by ChIP-Seq. ChIP was performed using the ChIP-IT High Sensitivity Kit with 30 µg of chromatin from a human glioma cell line. ChIP DNA was sequenced on the Illumina NextSeq and 16.8 million sequence tags were mapped to identify H3K36me3 binding on chromosome 7. The antibody was used at 4 µg per ChIP.



Chromatin Immunoprecipitation

Image 3. Chromatin IP: ChIP performed using HeLa Chromatin (1.5 x 10⁶ cell equivalents per ChIP) and 10 µg of Histone H3 trimethyl Lys36 antibody (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 either the PABPC1 (+ 0.5) or the PABPC1 (+18) gene. Data are presented as Fold Enrichment of the ChIP antibody



signal versus the negative control IgG using the ddCT method.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6971937.