

Histone H3K36me2 antibody (mAb)

Catalog No: 61019

RRID: AB_2650523

Clone: MABI 0332

Isotype: IgG1

Application(s): ChIP, DB, IF, WB

Reactivity: Human, Wide Range Predicted

Quantity: 100 µg

Purification: Protein G Chromatography

Host: Mouse

Concentration: 1.0 µg/µl

Molecular Weight: 17 kDa

Background: 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 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.

Immunogen: This Histone H3 dimethyl Lys36 antibody was raised against a peptide containing dimethyl Lys36 of human Histone H3.

Buffer: PBS pH 7.5 containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

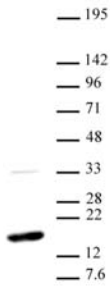
WB: 0.5 - 2 µg/ml dilution

DB: 0.5 - 2 µg/ml dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. 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. This product is guaranteed for 12 months from date of receipt.

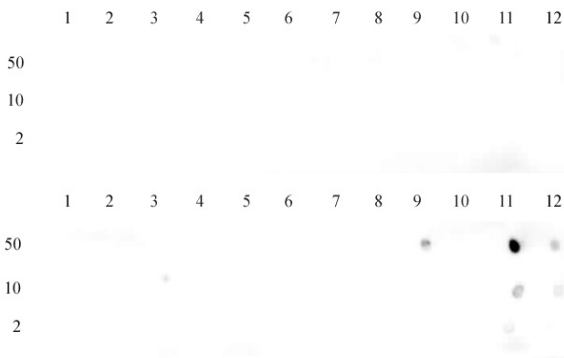
This product is for research use only and is not for use in diagnostic procedures.

This antibody is manufactured by MAB Institute, Inc.



Western blot of Histone H3 dimethyl Lys36 antibody.

HeLa nuclear extract (20 µg per lane) probed with H3K36me2 antibody (2 µg/ml dilution).



Dot blot of Histone H3 dimethyl Lys36 antibody.

Dot blot analysis was used to confirm the specificity of H3K36me2 antibody for dimethyl Lys36 of histone H3. Recombinant methylated peptides corresponding to the immunogen and related sequences were spotted onto PVDF and probed with H3K36me2 at 2 µg/ml. The amount of protein (picomoles) spotted is indicated next to each row.

Top panel - Lane 1: unmodified H3K4. Lane 2: H3K4me1. Lane 3: H3K4me2. Lane 4: H3K4me3. Lane 5: unmodified H3K9. Lane 6: H3K9me1. Lane 7: H3K9me2. Lane 8: H3K9me3. Lane 9: unmodified H3K79. Lane 10: H3K79me1. Lane 11: H3K79me2. Lane 12: H3K79me3.
 Bottom panel - Lane 1: unmodified H3K23. Lane 2: H3K23me1. Lane 3: H3K23me3. Lane 4: H3K23me3. Lane 5: unmodified H3K27. Lane 6: H3K27me1. Lane 7: H3K27me2. Lane 8: H3K27me3. Lane 9: unmodified H3K36. Lane 10: H3K36me1. Lane 11: H3K36me2. Lane 12: H3K36me3.