Rabbit Histone H3K9me2 Polyclonal Antibody | anti-H3K9me2 antibody

Histone H3K9me2 antibody (pAb)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA59925	**Rabbit**	**Human, Wide Range Predicted**	**Western Blot, Immunofluorescence, Immunocytochemistry, Dot Blot, Chromatin Immunoprecipitation, Immunoprecipitation**

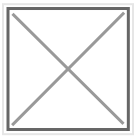
PRODUCT SYNONYMS

Histone H3K9me2; Polyclonal Antibody; Histone H3K9me2 antibody (pAb); anti-H3K9me2 antibody

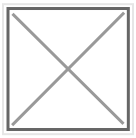
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Wide Range Predicted
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Protein A Chromatography
Form/Format	Purified IgG in PBS (pH7.5) with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic. For your convenience, an unpurified serum version of this antibody is also available.
Concentration	1ug/ul (varies by lot)
Applicable Applications for anti-H3K9me2 antibody	WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry), DB (Dot Blot), ChIP (Chromatin immunoprecipitation)
Conjugation	Methylated
Immunogen	This Histone H3 dimethyl Lys9 antibody was raised against a peptide including dimethyl-lysine 9 of histone H3.
Abs Residue	Lys
Preparation and Storage	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 degree C for up to 2 years. Keep all reagents on ice when not in storage.1ug/ul

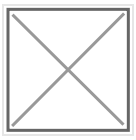
IMAGES



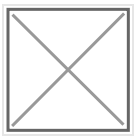
DB (Dot Blot)
Histone H3 dimethyl Lys9 antibody tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H3 dimethyl Lys9 antibody for dimethyl Lys9 histone H3. Methylated peptides corresponding to the immunogen and related sequences derived from histone H3 were spotted onto PVDF and probed with the antibody at 0.4 ug/ml. The amount of peptide (picomoles) spotted is indicated next to each row. Top row - Lane 1: Unmod Lys4. Lane 2: Monomethyl Lys4. Lane 3: Dimethyl Lys4. Lane 4: Trimethyl Lys4. Lane 5: Monomethyl Lys9. Lane 6: Unmod Lys9. Lane 7: Dimethyl Lys9. Lane 8: Trimethyl Lys9. Lane 9: Unmod Lys27. Lane 10: Monomethyl Lys27. Lane 11: Dimethyl Lys27. Lane 12: Trimethyl Lys27. Bottom row - Lane 1: dimethyl Lys14. Lane 2: monomethyl Lys18. Lane 3: dimethyl Lys18. Lane 4: trimethyl Lys18. Lane 5: Unmod H3 aa 18-27 peptide. Lane 6: monomethyl Lys23. Lane 7: dimethyl Lys23. Lane 8: trimethyl Lys23. Lane 9: unmod H3 aa 22-32 peptide. Lane 10: monomethyl Lys27. Lane 11: dimethyl Lys27. Lane 12: trimethyl Lys27.



WB (Western Blot)
Histone H3 dimethyl Lys9 antibody tested by Western blot. HeLa acid extract (20 ug per lane) probed with Histone H3 dimethyl Lys9 antibody (1 ug/ml).



IF (Immunofluorescence)
Histone H3 dimethyl Lys9 antibody tested by immunofluorescence. Detection of Histone H3 dimethyl Lys9 by immunofluorescence. HeLa cells were stained with Histone H3 dimethyl Lys9 antibody at a dilution of 1 ug/ml. Top panel: Histone H3 dimethyl Lys9 antibody staining. Middle panel: DAPI. Bottom panel: merge.



ChIP (Chromatin Immunoprecipitation)
Histone H3 dimethyl 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 ug of Histone H3 dimethyl Lys9 antibody 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 gene or the MyoD gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.

ADDITIONAL INFORMATION

Related Product Information for anti-H3K9me2 antibody	Short Description: Our Histone H3K9me2 antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, 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. 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). 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, 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.
Product Categories/Family for anti-H3K9me2 antibody	Primary Antibodies

NCBI AND UNIPROT INFORMATION

Molecular Weight	17kDa

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/polyclonal/histone-h3k9me2-antibody-western-blot-immunofluorescence-immunocytochemistry-dot-blot-chromatin-immunoprecipitation-elisa/59925