

Mouse Histone H3K27me1 Monoclonal Antibody | anti-H3K27me1 antibody

Histone H3K27me1 antibody (mAb)(Clone MABI 0321)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA59965	Mouse	Human, Wide Range Predicted	Western Blot, Immunofluorescence, Immunocytochemistry, Dot Blot, Chromatin Immunoprecipitation, Immunoprecipitation, Chromatin Immunoprecipitation, Immunoprecipitation

PRODUCT SYNONYMS

Histone H3K27me1; Monoclonal Antibody; Histone H3K27me1 antibody (mAb)(Clone MABI 0321); anti-H3K27me1 antibody

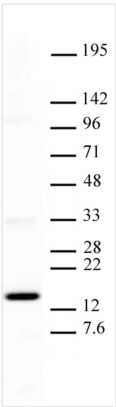
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Wide Range Predicted
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	MABI 0321
Purity/Purification	Protein G Chromatography
Form/Format	PBS pH7.5 containing 30% glycerol. 0.3M NaCl, and 0.035% sodium azide. Sodium azide is highly toxic.
Concentration	1ug/ul (varies by lot)
Applicable Applications for anti-H3K27me1 antibody	WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry), DB (Dot Blot), ChIP (Chromatin immunoprecipitation), ChIP (Chromatin immunoprecipitation)
Conjugation	Methylated
Immunogen	This Histone H3 monomethyl Lys27 antibody was raised against a peptide containing monomethyl Lys27 of human 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



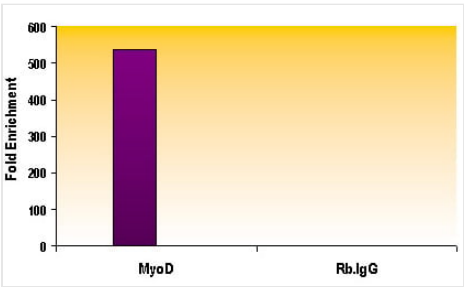
DB (Dot Blot)

Histone H3K27me1 antibody (mAb) tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H3 monomethyl Lys27 antibody for monomethyl Lys27 of histone H3. Recombinant methylated histone proteins corresponding to the immunogen and related sequences were spotted onto PVDF and probed with Histone H3 monomethyl Lys27 at 2 ug/ml. The amount of protein (picomoles) spotted is indicated next to each row. Lane 1: unmodified H3 protein. Lane 2: monomethyl Lys4 protein. Lane 3: dimethyl Lys4 protein. Lane 4: trimethyl Lys4 protein. Lane 5: monomethyl Lys9 protein. Lane 6: dimethyl Lys9 protein. Lane 7: trimethyl Lys9 protein. Lane 8: monomethyl Lys27 protein. Lane 9: dimethyl Lys27 protein. Lane 10: trimethyl Lys27 protein.



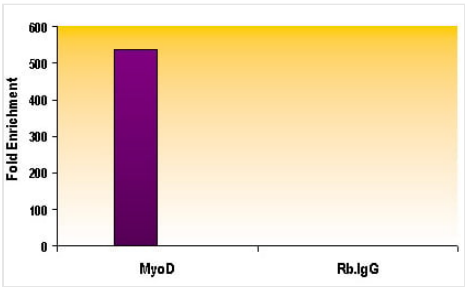
WB (Western Blot)

Histone H3K27me1 antibody (mAb) tested by Western blot. HeLa nuclear extract (20 ug per lane) probed with Histone H3 monomethyl Lys27 antibody (2 ug/ml dilution).



ChIP (Chromatin Immunoprecipitation)

Histone H3K27me1 antibody (mAb) tested by ChIP. 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 monomethyl Lys27 pAb or the equivalent amount of rabbit IgG. RT-qPCR was performed on DNA purified from each of the ChIP DNA using a primer pair for the MyoD gene. Data are presented as Fold Enrichment of the antibody signal versus the negative control IgG using the ddCT method.



ChIP (Chromatin Immunoprecipitation)

Histone H3K27me1 antibody (mAb) tested by ChIP-Seq. ChIP was performed using the ChIP-IT High Sensitivity Kit with 15 ug of chromatin from a human B cell lymphoma cell line and 2 ug of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 15 million sequence tags were mapped to identify Histone H3K27me1 binding sites. The image shows binding across a region of chromosome 6. You can view the complete data set in the UCSC Genome Browser, starting at this specific location, here.

ADDITIONAL INFORMATION

Related Product Information for anti-H3K27me1 antibody

Short Description: Our Histone H3K27me1 antibody (mAb)(Clone MAB1 0321) was raised in a Mouse host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, 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 27 of histone H3 can be mono-, di- or trimethylated (Histone H3 monomethyl Lys27, Histone H3 dimethyl Lys27 or Histone H3 trimethyl Lys27) by different histone methyltransferases such as EZH2 or NSD3. Methylation of this residue is mainly associated with transcriptional repression.

Product Categories/Family for anti-H3K27me1 antibody

Primary Antibodies

NCBI AND UNIPROT INFORMATION

Molecular Weight	17kDa
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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.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/histone-h3k27me1-antibody-clone-mabi-0321-western-blot-immunofluorescence-immunocytochemistry-dot-blot-chromatin-immunoprecipitation-chromatin-immunoprecipitation-elisa/59965>