

Rabbit Histone H4K12ac Monoclonal Antibody | anti-H4K12ac antibody

Histone H4K12ac antibody (mAb)(Clone MABI 0412)

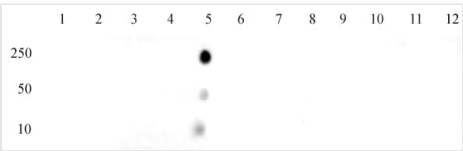
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA60044	Rabbit	Human, Wide Range Predicted	Western Blot, Dot Blot, Chromatin Immunoprecipitation, Immunoprecipitation

PRODUCT SYNONYMS

Histone H4K12ac; Monoclonal Antibody; Histone H4K12ac antibody (mAb)(Clone MABI 0412); anti-H4K12ac antibody

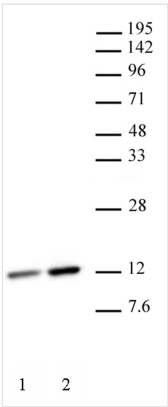
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Wide Range Predicted
Clonality	Monoclonal
Isotype	IgG1
Clone Number	MABI 0412
Purity/Purification	Protein G Chromatography
Form/Format	Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.
Concentration	1ug/ul (varies by lot)
Applicable Applications for anti-H4K12ac antibody	WB (Western Blot), DB (Dot Blot), ChIP (Chromatin immunoprecipitation)
Conjugation	Acetylated
Immunogen	This antibody was raised against a synthetic peptide containing acetyl-lysine 12 of human Histone H4.
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



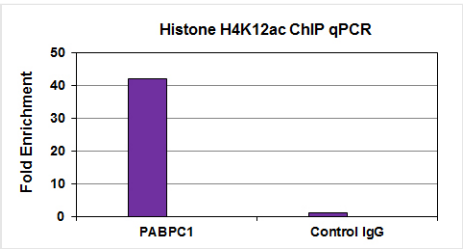
Application Data

Histone H4K12ac antibody (mAb) specificity tested by peptide array analysis. Peptide array analysis was used to confirm the specificity of this antibody for its intended modification. Histone H4K12ac antibody (mAb) was applied at a dilution of 0.7 ug/ml to MODified Histone Peptide Array tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H4K12ac antibody (mAb) for acetyl-Lys12 histone H4. Acetylated peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with Histone H4K12ac antibody (mAb) at a dilution of 2 ug/ml. The amount of peptide (picomoles) spotted is indicated next to each row. Lane 1: acetyl-Lys5 peptide. Lane 2: unmodified Lys5 peptide. Lane 3: acetyl-Lys8 peptide. Lane 4: unmodified Lys8 peptide. Lane 5: acetyl-Lys12 peptide. Lane 6: unmodified Lys12 peptide. Lane 7: acetyl-Lys16 peptide. Lane 8: unmodified Lys16 peptide. Lane 9: acetyl-Lys20 peptide. Lane 10: unmodified Lys20 peptide. Lane 11: acetyl-Lys31 peptide. Lane 12: unmodified Lys31 peptide.



WB (Western Blot)

Histone H4K12ac antibody (mAb) tested by Western blot. HeLa nuclear extract (20 ug per lane) probed with Histone H4K12ac (mAb) at a 2 ug/ml dilution. Lane 1: No treatment. Lane 2: cells treated with sodium butyrate.



ChIP (Chromatin Immunoprecipitation)

Histone H4K12ac antibody (mAb) 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 3 ug of Histone H4K12ac (mAb) or the equivalent amount of mouse 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 PABPC1 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-H4K12ac antibody	Short Description: Our Histone H4K12ac antibody (mAb)(Clone MAB1 0412) was raised in a Mouse host. It has been validated for use in Chromatin Immunoprecipitation, Dot blot 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 H4 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; it 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; they play a major role in regulating gene expression. Lysine N-epsilon-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in chromatin remodeling and in the regulation of gene expression in various cellular functions. The acetylation of histone H4 Lys12 is carried out by several histone acetyltransferases (HATs). Histone H4 Lys12 acetylation by TIP60 occurs in the nucleus, whereas Hat1-mediated acetylation of histone H4 Lys12 occurs in the cytoplasm, indicating the spatial regulation of histone acetylation. The acetylation of histone H4 Lys12 residue is commonly associated with transcriptional activation.
Product Categories/Family for anti-H4K12ac antibody	Primary Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	28173560
NCBI GeneID	121504
NCBI Accession #	NP_778224; AB_2793670
NCBI GenBank Nucleotide #	NM_175054.2
UniProt Accession #	P62805; P02304; P02305; Q6DRA9; Q6FGB8; Q6NWP7; A2VCL0; Q0VAS5; Q6B823
Molecular Weight	11,367 Da
NCBI Official Full Name	histone H4
NCBI Official Synonym Full Names	histone cluster 4, H4
NCBI Official Symbol	HIST4H4
NCBI Official Synonym Symbols	H4/p; HIST1H4A; HIST1H4B; HIST1H4C; HIST1H4D; HIST1H4E; HIST1H4F; HIST1H4H; HIST1H4I; HIST1H4J; HIST1H4K; HIST1H4L; HIST2H4A; HIST2H4B; MGC24116
NCBI Protein Information	histone H4; histone 4, H4; OTTHUMP00000239323
UniProt Protein Name	Histone H4
UniProt Gene Name	HIST1H4A
UniProt Synonym Gene Names	H4/A; H4FA
UniProt Entry Name	H4_HUMAN

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/monoclonal/histone-h4k12ac-antibody-clone-mabi-0412-western-blot-dot-blot-chromatin-immunoprecipitation-elisa/60044>