

Rabbit Histone H4K16ac Polyclonal Antibody | anti-H4K16ac antibody

Histone H4K16ac antibody (pAb)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA59815	Rabbit	Budding Yeast, Drosophila, Human, Mouse, Wide Range Predicted	Western Blot, Immunofluorescence, Dot Blot, Chromatin Immunoprecipitation, Immunoprecipitation, Chromatin Immunoprecipitation, Immunoprecipitation

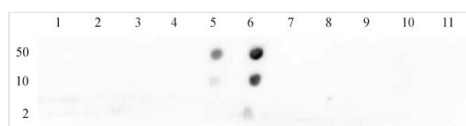
PRODUCT SYNONYMS

Histone H4K16ac; Polyclonal Antibody; Histone H4K16ac antibody (pAb); anti-H4K16ac antibody

PRODUCT SPECIFICATIONS

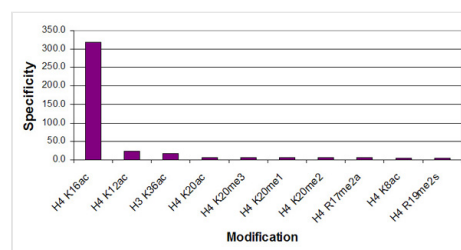
Host	Rabbit
Reactivity	Budding Yeast, Drosophila, Human, Mouse, Wide Range Predicted
Clonality	Polyclonal
Form/Format	Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic. For your convenience, an IgG version of this antibody that was purified by Protein A Chromatography is also available.
Applicable Applications for anti-H4K16ac antibody	WB (Western Blot), IF (Immunofluorescence), DB (Dot Blot), ChIP (Chromatin immunoprecipitation), ChIP (Chromatin immunoprecipitation)
Conjugation	Acetylated
Immunogen	This Histone H4 acetyl Lys16 antibody was raised against a peptide including acetyl-lysine 16 of 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

IMAGES



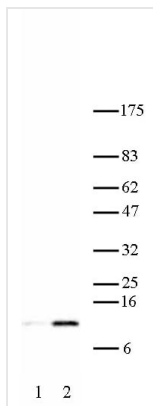
DB (Dot Blot)

Histone H4K16ac antibody (pAb) tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H4 acetyl Lys16 pAb for histone H4 acetyl Lys16. Acetylated peptides corresponding to the immunogen and related H4 sequences were spotted onto PVDF and probed with the antibody at 1:4,000. The amount of peptide (picomoles) spotted is indicated next to each row. Lane 1: Unmodified Lys8 peptide. Lane 2: Acetyl Lys5 peptide. Lane 3: Acetyl Lys8 peptide. Lane 4: Acetyl Lys12 peptide. Lane 5: Unmodified Lys16 peptide. Lane 6: Acetyl Lys16 peptide. Lane 7: Acetyl Lys20 peptide. Lane 8: Unmodified Lys31 peptide. Lane 9: Acetyl Lys31 peptide. Lane 10: Acetyl Lys59 peptide. Lane 11: Acetyl Lys91 peptide.



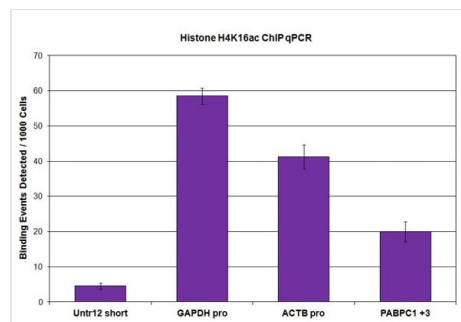
Application Data

Histone H4K16ac antibody (pAb) specificity tested by peptide array analysis. Peptide array analysis was used to confirm the specificity of this antibody for its intended modification. Histone H4 acetyl Lys16 antibody was applied at a dilution of 1:10,000 to Modified Histone Peptide Array so reactive and related peptides for both peptides is shown. Array Data File



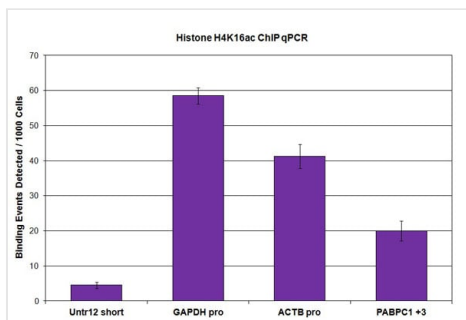
WB (Western Blot)

Histone H4K16ac antibody (pAb) tested by Western blot. HeLa nuclear extract (20 ug) probed with Histone H4 acetyl Lys16 polyclonal antibody (1:1,000 dilution). Lane 1: No treatment. Lane 2: Cells treated with sodium butyrate.



ChIP (Chromatin Immunoprecipitation)

Histone H4K16ac antibody (pAb) tested by ChIP. Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT High Sensitivity Kit with 5 ug of chromatin from HeLa cells and 10 ul of Histone H4K16ac antibody. ChIP DNA was used in qPCR with the negative control primer pairs or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



ChIP (Chromatin Immunoprecipitation)

Histone H4K16ac antibody (pAb) tested by ChIP-Seq. ChIP was performed using the ChIP-IT High Sensitivity Kit with 15 ug of chromatin from HeLa cells and 10 ul of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 12 million sequence tags were mapped to identify Histone H4K16ac binding sites. The image shows binding across a region of chromosome 5. 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-H4K16ac antibody

Short Description: Our Histone H4K16ac antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, Dot blot, Immunofluorescence and Western blot; it has been shown to react with Budding Yeast, Drosophila, Human and Mouse 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. NoRC is a SMARCA5 (SNF2h)-containing chromatin remodeling complex. The bromodomain of TIP5, the large subunit of NoRC, interacts with acetylated Histone H4 Lys16, (H4K16ac) and cooperates with an adjacent PHD finger to recruit histone deacetylases and DNA methyltransferases to rDNA, leading to the silencing of rDNA.

Product Categories/Family for anti-H4K16ac antibody

Primary Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	28173560
NCBI GeneID	121504
NCBI Accession #	NP_778224; AB_2636968
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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/histone-h4k16ac-antibody-western-blot-immunofluorescence-dot-blot-chromatin-immunoprecipitation-chromatin-immunoprecipitation-elisa/59815>