Product Datasheet

Histone H3 [ac Lys14, ac Lys9] Antibody - BSA Free
NBP2-59181

Unit Size: 50 ug

Store at -20C. Avoid freeze-thaw cycles.

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Publications: 1

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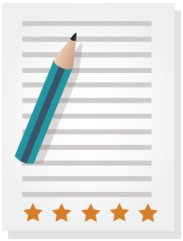
Updated 2/23/2025 v.20.1



NBP2-59181

Histone H3 [ac Lys14, ac Lys9] Antibody - BSA Free

Product Information

Unit Size	50 ug
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide and 0.05% ProClin 300
Isotype	IgG
Purity	Peptide affinity purified
Buffer	PBS
Target Molecular Weight	15 kDa

Product Description

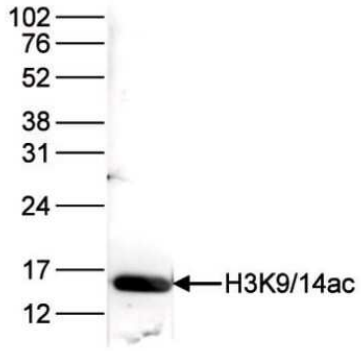
Host	Rabbit
Gene ID	126961
Gene Symbol	H3C14
Species	Human, Mouse, A. thaliana, Fungi, Zebrafish
Reactivity Notes	A. Nidulans
Immunogen	The exact sequence of the immunogen to this Histone H3 [ac Lys14, ac Lys9] antibody is proprietary.

Product Application Details

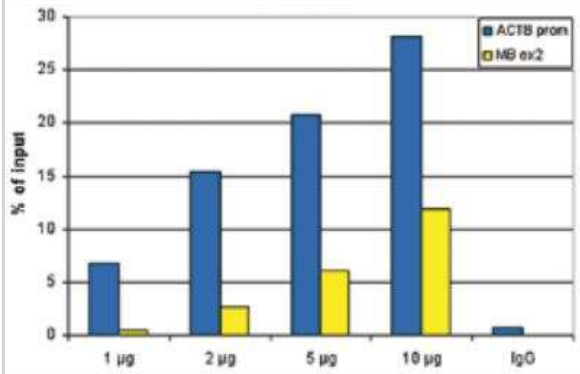
Applications	Western Blot, Dot Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Chromatin Immunoprecipitation (ChIP), Chromatin Immunoprecipitation Sequencing
Recommended Dilutions	Western Blot 1:1000, ELISA 1:100, Immunocytochemistry/ Immunofluorescence 1:500, Dot Blot 1:20000, Chromatin Immunoprecipitation (ChIP) 1-2 ug/IP, Chromatin Immunoprecipitation Sequencing

Images

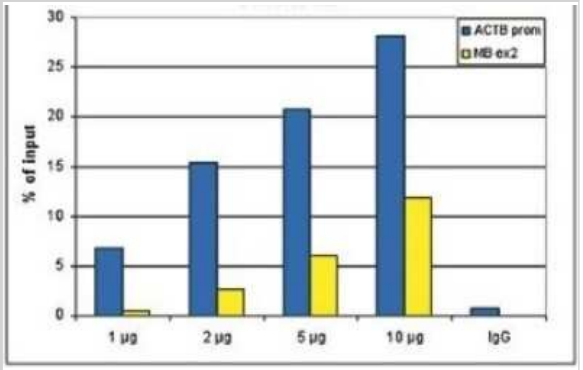
Western Blot: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - Histone extracts of HeLa cells (15 ug) were analysed by Western blot using the antibody directed against H3K9/14ac diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. Observed molecular weight is ~15 kDa.



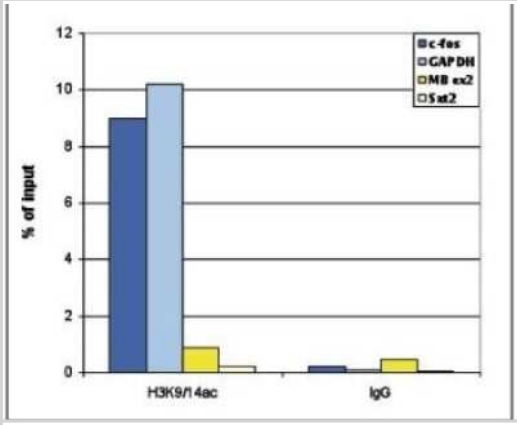
Chromatin Immunoprecipitation: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - ChIP assays were performed using HeLa cells, the antibody against H3K9/14ac and optimized primer pairs for qPCR. ChIP was performed with a ChIP kit, using sheared chromatin from 1.5 million cells. A titration of the antibody consisting of 1, 2, 5 and 10 ug per ChIP experiment was analysed. IgG (5 ug/IP) was used as negative IP control.QPCR was performed using primers specific for the promoter of the ACTB gene as a positive control target and for exon 2 of the MB gene as a negative control target. Figure shows the recovery (the relative amount of immunoprecipitated DNA compared to input DNA). These results confirm the observation that acetylation of H3K9/14 is present at active promoters.



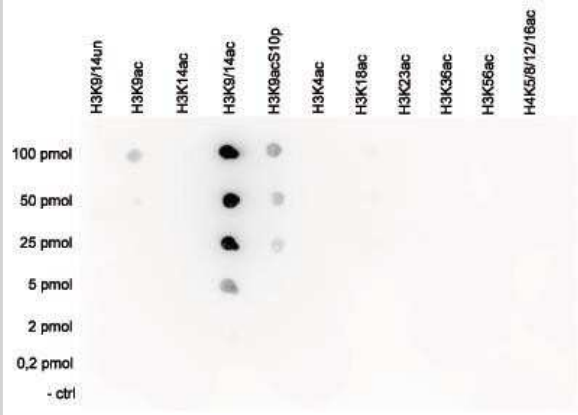
Chromatin Immunoprecipitation: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - ChIP assays were performed using HeLa cells, the antibody against H3K9/14ac and optimized primer pairs for qPCR. ChIP was performed using sheared chromatin from 1.5 million cells. A titration of the antibody consisting of 1, 2, 5 and 10 ug per ChIP experiment was analysed. IgG (5 ug/IP) was used as negative IP control. QPCR was performed using primers specific for the promoter of the ACTB gene as a positive control target and for exon 2 of the MB gene as a negative control target. Figure shows the recovery (the relative amount of immunoprecipitated DNA compared to input DNA). These results confirm the observation that acetylation of H3K9/14 is present at active promoters.



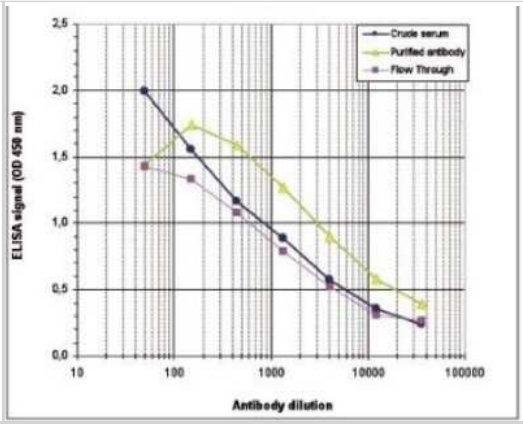
Chromatin Immunoprecipitation: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - ChIP was performed with 1 ug of the antibody against H3K9/14ac on sheared chromatin from 1 million HeLaS3 cells. IgG (2 ug/IP) was used as a negative IP control. The IP'd DNA was analysed by QPCR with optimized PCR primer pairs for the promoters of the active GAPDH and c-fos genes, used as positive control targets, and the coding region of the inactive MB gene and the Sat2 satellite repeat, used as negative control targets.



Dot Blot: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - A Dot Blot analysis was performed to test the cross reactivity of the antibody against H3K9/14ac with peptides containing other histone modifications and the unmodified H3K9/14 sequence. One hundred to 0.2 pmol of the respective peptides were spotted on a membrane. The antibody was used at a dilution of 1:20,000. Figure shows a high specificity of the antibody for the modification of interest.



ELISA: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - To determine the titer of the antibody, an ELISA was performed using a serial dilution of the antibody directed against H3K9/14ac, crude serum and flow through in antigen coated wells. The antigen used was a peptie containing the histone modification of interest. By plotting the absorbance against the antibody dilution, the titer of the purified antibody was estimated to be 1:5,900.



Immunofluorescence: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - Mouse NIH3T3 cells were stained with the antibody against H3K9/14ac and with DAPI. Cells were fixed with 4% formaldehyde for 10 minutes and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labelled with the H3K9/14ac antibody (left) diluted 1:500 in blocking solution followed by an anti- rabbit antibody conjugated to Alexa Fluor 488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.

Publications

Mountanea OG, Mantzourani C, Gkikas D et Al. Asymmetric Synthesis of Saturated and Unsaturated Hydroxy Fatty Acids (HFAs) and Study of Their Antiproliferative Activity Biomolecules 2024-01-24 [PMID: 38254710]

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Products Related to NBP2-59181

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NB21-1037PEP	Histone H3 [Monomethyl Lys4, p Thr6] Antibody Blocking Peptide

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