# **Product Datasheet**

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

Unit Size: 50 ug

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

www.novusbio.com



technical@novusbio.com

**Publications: 1** 

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NBP2-59181

Updated 9/9/2025 v.20.1

Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications
Submit a review at www.novusbio.com/reviews/destination/NBP2-59181



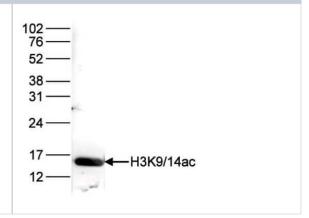
#### NBP2-59181

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

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	
Description	Novus Biologicals Rabbit Histone H3 [ac Lys14, ac Lys9] Antibody - BSA Free (NBP2-59181) is a polyclonal antibody validated for use in WB, ELISA, ICC/IF and ChIP. Anti-Histone H3 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
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

# **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.

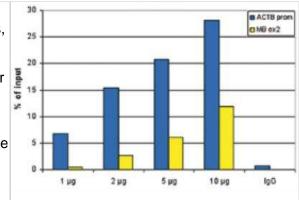




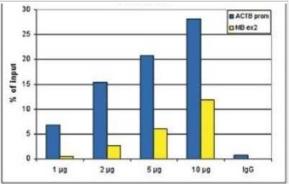
Chromatin Immunoprecipitation Sequencing

1:500, Dot Blot 1:20000, Chromatin Immunoprecipitation (ChIP) 1-2 ug/IP,

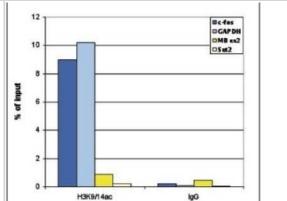
Chromatin Immunoprecipitation: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - ChIP assays were performed using HeLa cells, the antibody against H3K9/14ac and optimized primer pairs for qPCR. ChIP was performed with a ChIP kit, using sheared chromatin from 1.5 million cells. A titration of the 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.



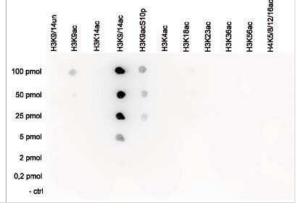
Chromatin Immunoprecipitation: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - ChIP assays were performed using HeLa cells, the antibody against H3K9/14ac and optimized primer pairs for qPCR. ChIP was performed using sheared chromatin from 1.5 million cells. A titration of the antibody consisting 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.



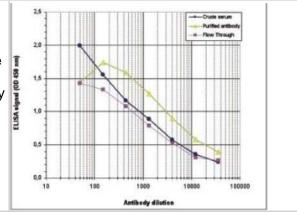
Chromatin Immunoprecipitation: Histone H3 [ac Lys14, ac Lys9] Antibody [NBP2-59181] - ChIP was performed with 1 ug of the antibody against H3K9/14ac on sheared chromatin from 1 million HeLaS3 cells. IgG (2 ug/IP) was used as a negative IP control. The IP'd DNA was analysed by QPCR with optimized PCR 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]





## Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112

USA

Phone: 303.730.1950 Toll Free: 1.888.506.6887

Fax: 303.730.1966

nb-customerservice@bio-techne.com

#### **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6

Canada

Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402

canada.inquires@bio-techne.com

#### **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449

Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

#### **General Contact Information**

www.novusbio.com

Technical Support: nb-technical@bio-

techne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

### **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

NB21-1101PEP Histone H3 [p Thr11] Antibody Blocking Peptide

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP2-59181

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications

