Product Datasheet

Histone H3 [Trimethyl Lys9] Antibody
NBP2-59152

Unit Size: 100 ul

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

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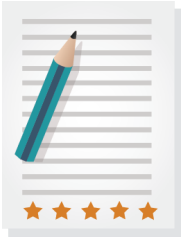


NBP2-59152

Histone H3 [Trimethyl Lys9] Antibody

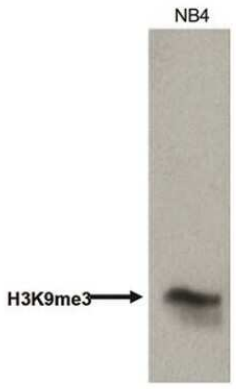
Product Information	
Unit Size	100 ul
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Whole Antiserum
Buffer	Serum
Target Molecular Weight	15 kDa

Product Description	
Host	Rabbit
Gene ID	126961
Gene Symbol	H3C14
Species	Human, Mouse
Immunogen	The exact sequence of the immunogen to this Histone H3 [Trimethyl Lys9] antibody is proprietary.

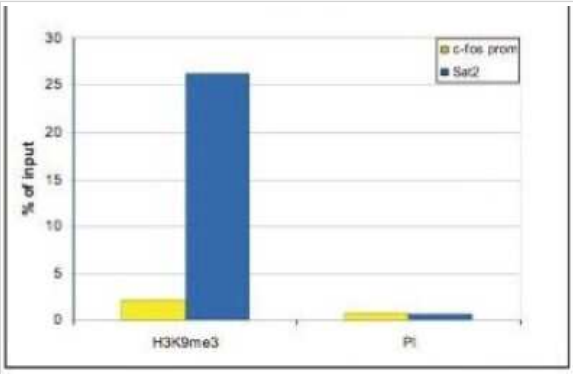
Product Application Details	
Applications	Western Blot, Chromatin Immunoprecipitation, Dot Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunofluorescence
Recommended Dilutions	Western Blot 1:750, Chromatin Immunoprecipitation 1:5000, ELISA 1:1000, Immunocytochemistry/ Immunofluorescence 1:200, Dot Blot 1:10000, Immunofluorescence 1:200

Images

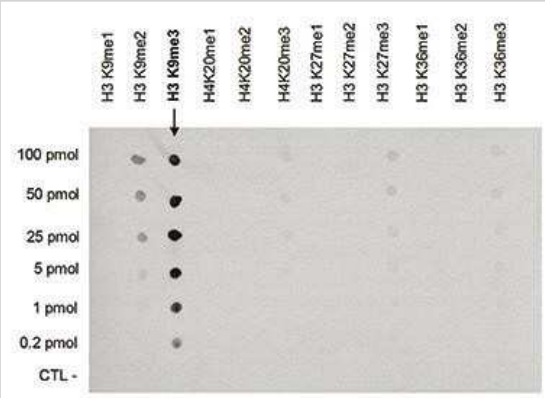
Western Blot: Histone H3 [Trimethyl Lys9] Antibody [NBP2-59152] - Histone (acid) extracts of NB4 (human promyelocytic leukemia) cells were analyzed using the antibody against H3K9me3 diluted 1:750 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest of interest is indicated on the left.



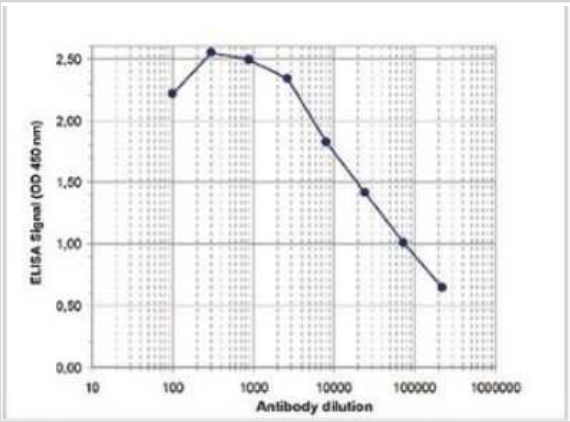
Chromatin Immunoprecipitation: Histone H3 [Trimethyl Lys9] Antibody [NBP2-59152] - ChIP assays were performed using undifferentiated human teratocarcinoma cells (NCCIT), the antibody against H3K9me3 and optimized PCR primer sets for qPCR. Sheared chromatin from 10,000 cells was used per ChIP experiment. The antibody was diluted 1:5000. The pre-immune serum (PI, diluted 1:5000) was used as a negative control. Quantitative PCR was performed using primer sets for the satellite repeat Sat2 as a positive control and for the promoter of the house keeping gene c-fos, as a negative control. Figure shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis). These results are in accordance with the observation that H3K9me3 is preferably present at heterochromatin.



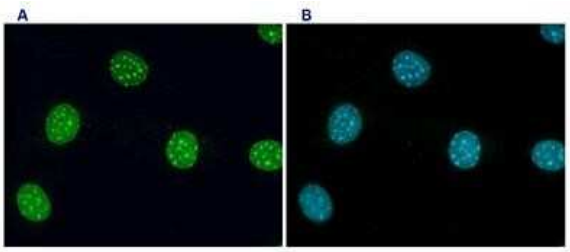
Dot Blot: Histone H3 [Trimethyl Lys9] Antibody [NBP2-59152] - Analysis was performed to test the cross reactivity of the antibody against H3K9me3 with peptides containing other histone modifications of histone H3 and H4. Other histone modifications include mono- and dimethylation of the same lysine and mono-, di- and trimethylation of lysine 27 and 36 of H3, and of lysine 20 of H4. 100 to 0.2 pmol of peptide containing the respective histone modification were spotted on a membrane. The antibody was used at a dilution of 1:10,000. Figure shows a high specificity of the antibody for the modification of interest.



ELISA: Histone H3 [Trimethyl Lys9] Antibody [NBP2-59152] - To determine the titer of the antibody, an ELISA was performed using a serial dilution of the antibody directed against H3K9me3. The antigen used was a peptide containing the histone modification of interest. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:35,000.



Immunofluorescence: Histone H3 [Trimethyl Lys9] Antibody [NBP2-59152] - NIH3T3 cells (mouse fibroblasts) were stained with the antibody against H3K9me3 and with DAPI. Cells were formaldehyde fixed, permeabilized with Triton X-100 and blocked with PBS containing 2.5% BSA. Figure A: cells were immunofluorescently labelled with the H3K9me3 antibody (diluted 1:200 and incubated for 1 hour at room temperature) followed by goat anti-rabbit antibody conjugated to FITC. Figure B: staining of the nuclei with DAPI, which specifically labels DNA. Both antibody and DAPI staining are restricted to the nucleus. The dense signals obtained with both stainings characterize the distribution pattern of H3K9me3, which is linked to the transcriptionally inactive, condensed pericentric heterochromatin.



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

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