Product Datasheet Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) - BSA Free NBP1-30141

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NBP1-30141

Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	6F12-H4
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	Tris-Glycine and 0.15M NaCl
Target Molecular Weight	15 kDa
Product Description	
Host	Mouse
Gene ID	126961
Gene Symbol	H3C14
Species	Human, Mouse, Rat, Porcine, C. elegans, Drosophila, Invertebrate, Mammal, Yeast
Reactivity Notes	Predicted to react with most mammalian species. Invertebrate / Blattella germanica (German cockroach) reactivity reported in scientific literature (PMID: 23872316). Porcine reactivity reported in scientific literature (PMID: 25736622)
Immunogen	This Histone H3 [Trimethyl Lys9] antibody (6F12-H4) was raised against a synthetic peptide made to an N-terminal region of Histone H3 (between amino acids 1-50). [UniProt# P84243]
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:2000, ELISA 1:100-1:2000, Immunohistochemistry 1:1000. Use reported in scientific literature (PMID 23872316), Immunocytochemistry/ Immunofluorescence 1:200, Immunoprecipitation 1:10-1:500. Use reported in scientific literature (PMID 28270554), Immunohistochemistry-Paraffin 1:1000, Chromatin Immunoprecipitation (ChIP) 1:10-1:500
Application Notes	In Western blot, a band is seen at ~15 kDa.

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Images

Western Blot: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Whole cell protein from human HeLa, A431, mouse Neuro2A and rat PC12 cells was separated on a 4-20% gel by SDS-PAGE, transferred to 0.2 um PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 1.0 ug/ml anti-Histone h3 in block buffer and detected with an anti-mouse HRP secondary antibody using chemiluminescence. Observed molecular weight is ~15 kDa.

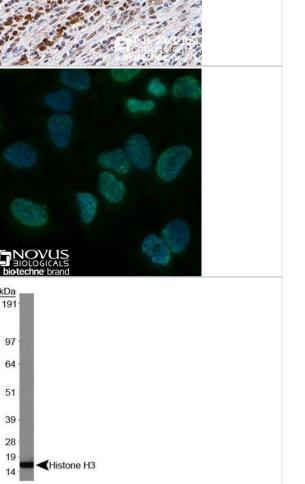
Immunohistochemistry-Paraffin: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Histone 3 was detected in immersion fixed paraffin-embedded sections of human colon cancer using anti-human mouse monoclonal antibody (Catalog # NBP1-30141) at 1:1000 dilution overnight at 4C. Tissue was stained using the VisuCyte anti-mouse HRP polymer detection reagent (Catalog # VC001) with DAB chromogen (brown) and counterstained with hematoxylin (blue). Images may not be copied, printed or otherwise disseminated without express written permission of Novus Biologicals a bio-techne brand.

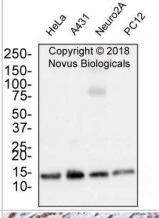
Immunocytochemistry/Immunofluorescence: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.5% Triton X-100. The cells were incubated with anti-Histone H3 [Trymethyl Lys9] (6F12-H4) at 2 ug/ml overnight at 4C and detected with an anti-mouse DyLight 488 (green) at a 1:500 dilution. Nuclei were counterstained with DAPI (blue). Cells were imaged using a 40X objective.

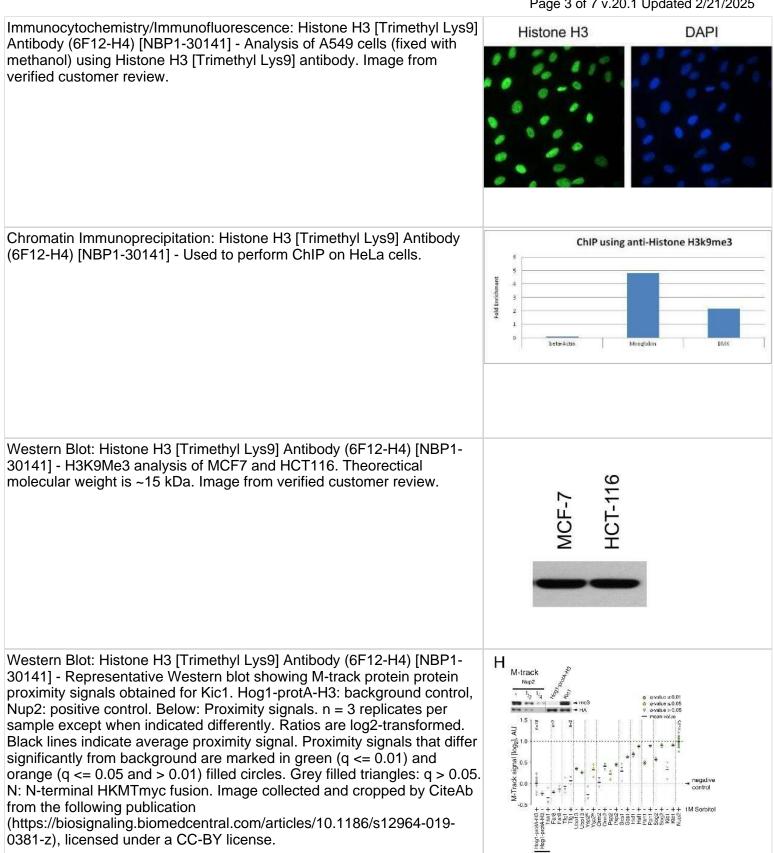
Western Blot: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Analysis of Histone H3 (NBP1-30141) using HeLa nuclear lysate [NB800-PC9]. Observed molecular weight ~15 kDa.







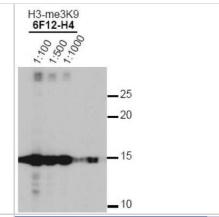








Western Blot: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Analysis of Histone H3 K9-me3 in HeLa histone lysates. Observed molecular weight is ~15 kDa.



Histone H3 [Trimethyl Lys9] (6F12-H4) was detected in immersion fixed MCF7 human breast cancer cell line using Mouse anti- Histone H3 [Trimethyl Lys9] (6F12-H4) Protein G Purified Monoclonal Antibody conjugated to DyLight 550 (Catalog # NBP1-30141R) (red) at 5 μ g/mL overnight at 4C. Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.





Publications

Shi Q, Xu G, Jiang Y, Yang J et Al. Phospholipase PLCE1 Promotes Transcription and Phosphorylation of MCM7 to Drive Tumor Progression in Esophageal Cancer Cancer Res 2023-12-20 [PMID: 38117512]

Shiyou Wei, Dandan Ling, Jingui Zhong, Rui Chang, Xinyu Ling, Zhigang Chen, Ruowang Duan Elk1 enhances inflammatory cell infiltration and exacerbates acute lung injury/acute respiratory distress syndrome by suppressing Fcgr2b transcription Molecular Medicine 2024-04-22 [PMID: 38649840]

Han-Jin Bae, Seong-Jin Shin, Seung Bin Jo, Cheng Ji Li, Dong-Joon Lee, Jun-Hee Lee, Hae-Hyoung Lee, Hae-Won Kim, Jung-Hwan Lee Cyclic stretch induced epigenetic activation of periodontal ligament cells Materials Today Bio 2024-04-12 [PMID: 38654935]

Petrosino JM, Longenecker JZ, Ramkumar S et al. Paracardial fat remodeling affects systemic metabolism through alcohol dehydrogenase 1 The Journal of clinical investigation 2021-02-15 [PMID: 33586683]

Sun X, Eastman G, Shi Y et al. Structural and functional damage to neuronal nuclei caused by extracellular tau oligomers bioRxiv : the preprint server for biology 2023-05-08 [PMID: 37214909] (Western Blot)

Legartov S, Lochmanov G, B rtov E. The Highest Density of Phosphorylated Histone H1 Appeared in Prophase and Prometaphase in Parallel with Reduced H3K9me3, and HDAC1 Depletion Increased H1.2/H1.3 and H1.4 Serine 38 Phosphorylation Life (Basel) 2022-05-27 [PMID: 35743829] (Immunocytochemistry/ Immunofluorescence)

Malla AB, Yu H, Farris D et al. DOT1L bridges transcription and heterochromatin formation at mammalian pericentromeres EMBO reports 2023-06-15 [PMID: 37317657]

Marsoner T, Yedavalli P, Masnovo C et al. Aurora B activity is promoted by cooperation between discrete localization sites in budding yeast Molecular biology of the cell 2022-06-15 [PMID: 35704464]

Hollenstein DM, Veis J, Romanov N et al. PP2ARts1 antagonizes Rck2-mediated hyperosmotic stress signaling in yeast Microbiological research [PMID: 35461031] (WB, Yeast)

Saleh T, El-Sadoni M, Alhesa A Et al. Expression of Senescence and Apoptosis Biomarkers in Synchronous Bilateral Breast Cancer: A Case Report Current oncology (Toronto, Ont.) 2021-09-30 [PMID: 34677245] (IF/IHC, Human)

Hollenstein DM, GErecovA G, Romanov N Et al. A phosphatase-centric mechanism drives stress signaling response EMBO reports 2021-11-04 [PMID: 34558777] (PLA, Yeast)

Bozic J, Motaln H, JaneZ AP et al. Interactome screening of C9orf72 dipeptide repeats reveals VCP sequestration and functional impairment by polyGA Brain : a journal of neurology 2021-09-17 [PMID: 34534264] (WB, Human)

More publications at <u>http://www.novusbio.com/NBP1-30141</u>



Procedures

Protocol Specific for NBP1-30091- Histone H3 [K9-me3] Antibody (NBP1-30141)

Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 40 ug of total protein per lane.

2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.

3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations

and locations of molecular weight markers using a pencil.

4. Rinse the blot in TBS for approximately 5 minutes.

5. Block the membrane using 5% BSA in TBS + Tween, 1 hour at RT.

6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.

7. Dilute the rabbit anti-Histone H4 [K20-me1]primary antibody (NBP1-30091) in blocking buffer and incubate 1 hour at room

temperature.

8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.

9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.

10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).

11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL). Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided

it does not interfere with antibody-antigen binding.



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Products Related to NBP1-30141

NBP1-30141R	Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [DyLight 550]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]

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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.

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