# **Product Datasheet**

# Histone H3 Antibody NBP1-30141SS

Unit Size: 0.025 ml

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

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Updated 6/15/2014 v.20.1

# NBP1-30141SS

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

Product Information	
0.025 ml	
1 mg/ml	
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.	
Monoclonal	
6F12-H4	
0.05% Sodium Azide	
IgG1 Kappa	
Protein G purified	
Tris-glycine, 150 mM NaCl	
15 kDa	
Mouse	
126961	
H3F3A	
Human, Mouse, Rat, C. elegans, Drosophila, Invertebrate, Mammal, Yeast	
All mammals including human, mouse and rat, Drosophila, C. elegans, yeast. Invertebrate / Blattella germanica (German cockroach) reactivity reported in scientific literature (PMID: 23872316)	
Nuclear Marker	
A synthetic peptide made to an N-terminal region of Histone H3 (between amino acids 1-50). [UniProt# P84243]	
Western Blot, Chromatin Immunoprecipitation, ELISA, Immunocytochemistry/Immunofluorescence, Immunohistochemistry	
Chromatin Immunoprecipitation 1:10-1:500, ELISA 1:100-1:2000, Immunocytochemistry/Immunofluorescence 1:200, Immunohistochemistry, Western Blot 1:2000	
This Histone H3 [Trimethyl Lys9] (6F12-H4) antibody is useful in Chromatin Immunoprecipitation, ELISA, Immunocytochemistry/Immunofluorescence and Western blot. In WB a band is seen at ~15 kDa. Use in Immunohistochemistry reported in scientific literature (PMID: 23872316)	

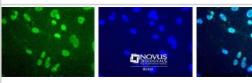


#### **Images**

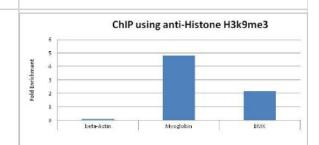
Western Blot: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - H3K9Me3 analysis of MCF7 and HCT116. Image from verified customer review.

MCF-7 HCT-116

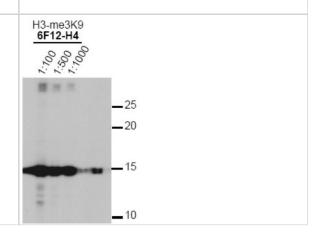
Immunocytochemistry/Immunofluorescence: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Histone H3 [trimethyl lys9] staining in Hela cells detected with a Dylight 488 labeled secondary antibody (Green) with Hoechst 33258 nuclear counterstain (Blue)



Chromatin Immunoprecipitation: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Used to perform ChIP on Hela cells.



Western Blot: Histone H3 [Trimethyl Lys9] Antibody (6F12-H4) [NBP1-30141] - Analysis of Histone H3 K9-me3 in HeLa histone lysates.



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



#### **Publications**

NO JG, CHOI MK, KWON DJ, YOO JG. Cell-free extract from porcine induced pluripotent stem cells can affect porcine somatic cell nuclear reprogramming Journal of Reproduction and Development. 2015 Jan 24 (ICC/IF, WB, Porcine)

#### Details:

Histone H3 [Trimethyl Lys9] antibody (6F12-H4) used for WB on lysates of porcine embryonic fibroblasts / EFs that were treated with induced pluripotent stem cells/iPSCs extracts for 30 minutes (Figure 1B). The antibody also used for ICC-IF on porcine somatic cell nuclear transfer/SCNT embryos after 4 hours of fusion (Figure 3C). See full text for detailed WB and ICC-IF protocols with this experimental model.

Krapivinsky G, Krapivinsky L, Manasian Y, Clapham DE. The TRPM7 Chanzyme Is Cleaved to Release a Chromatin-Modifying kinase. Cell. 2014 May 22 [PMID: 24855944] (WB, Mouse)

Tan J, Yang X, Zhuang L et al. Pharmacologic disruption of Polycomb-repressive complex 2-mediated gene repression selectively induces apoptosis in cancer cells. Genes Dev. 2007 [PMID: 17437993]

Herraiz A, Belles X, Piulachs MD et al. Chorion formation in panoistic ovaries requires windei and trimethylation of histone 3 lysine 9. Exp Cell Res 2013 Jul 18 [PMID: 23872316] (IHC, ICC/IF, Invertebrate)

Cornacchia D, Dileep V, Quivy JP et al. Mouse Rif1 is a key regulator of the replication-timing programme in mammalian cells EMBO J 2012 Jul 31 [PMID: 22850673] (WB, Mouse)



#### **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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#### 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 guarantee, please visit www.novusbio.com/guarantee.

