

# Product Datasheet

## Histone H3.3B Antibody (2D7-H1) - Azide and BSA Free H00003021-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**H00003021-M01**

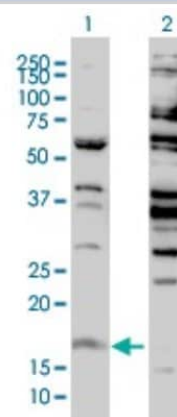
Histone H3.3B Antibody (2D7-H1) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2D7-H1
Preservative	No Preservative
Isotype	IgG1 Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	3021
Gene Symbol	H3F3B
Species	Human, Mouse, Bovine, Drosophila, Xenopus
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 23903189). Xenopus reactivity reported in scientific literature (PMID: 23102146). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Specificity/Sensitivity	H3F3B - H3 histone, family 3B (H3.3B)
Immunogen	H3F3B (AAH17558, 1 a.a. ~ 136 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. MARTKQTARKSTGGKAPRKQLATKAARKSAPSTGGVKKPHRYRPGTVALREI RRYQKSTELLIRKLPFQRLVREIAQDFKTDLRFSAAIGALQEASEAYLVGLFED TNLCAIHAKRVTIMPKDIQLARRIRGERA
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Knockout Validated
Recommended Dilutions	Western Blot, ELISA, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Knockout Validated
Application Notes	Antibody reactivity against transfected lysate and recombinant protein for WB. It has been used for IHC-P, IF and ELISA. Knock Out Validation was reported in scientific literature (PMID: 26159997).

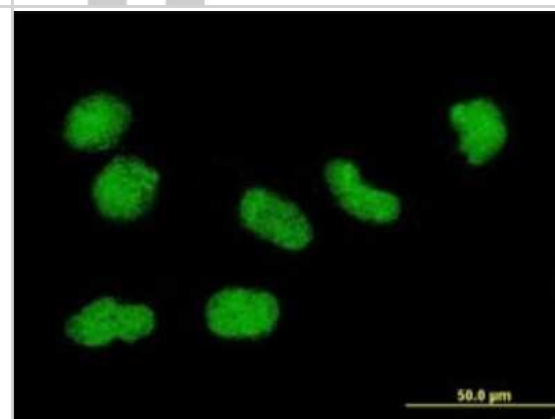


## Images

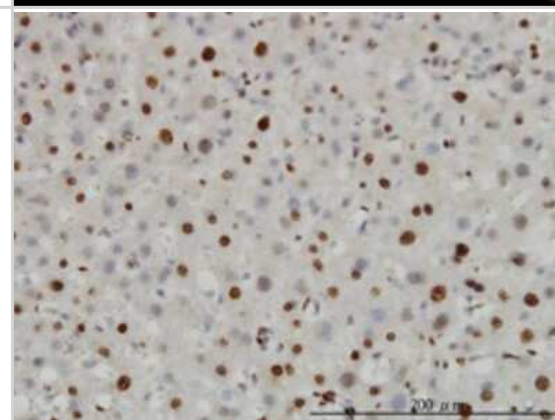
Western Blot: Histone H3.3B Antibody (2D7-H1) [H00003021-M01] - Analysis of H3F3B expression in transfected 293T cell line by H3F3B monoclonal antibody (M01), clone 2D7-H1. Lane 1: H3F3B transfected lysate (15 KDa). Lane 2: Non-transfected lysate.



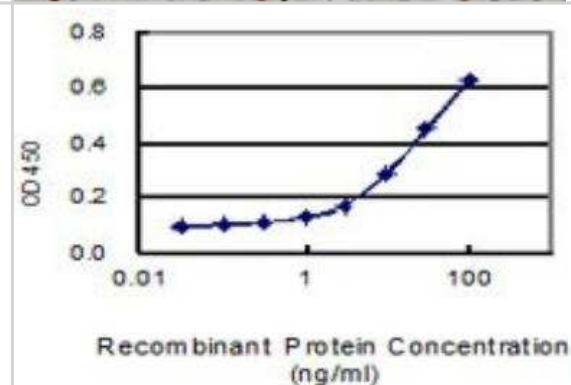
Immunocytochemistry/Immunofluorescence: Histone H3.3B Antibody (2D7-H1) [H00003021-M01] - Analysis of monoclonal antibody to H3F3B on HeLa cell. Antibody concentration 10 ug/ml.



Immunohistochemistry-Paraffin: Histone H3.3B Antibody (2D7-H1) [H00003021-M01] - Analysis of monoclonal antibody to H3F3B on formalin-fixed paraffin-embedded human liver. Antibody concentration 3 ug/ml.



ELISA: Histone H3.3B Antibody (2D7-H1) [H00003021-M01] - Detection limit for recombinant GST tagged H3F3B is 1 ng/ml as a capture antibody.



## Publications

- Xuemei W, Lu W, Jie D et al. Distinct role of histone chaperone Asf1a and Asf1b during fertilization and pre-implantation embryonic development in mice. *Epigenetics Chromatin*. 2021-12-14 [PMID: 34906203]
- Jake R, Mike W, Brooke A et al. ARID1A-dependent maintenance of H3.3 is required for repressive CHD4-ZMYND8 chromatin interactions at super-enhancers. *BMC Biol*. 2022-09-25 [PMID: 36153585]
- Kelly B, Vanessa C, Jennifer Y et al. A knockout-first model of H3f3a gene targeting leads to developmental lethality. *Genesis*. 2023-01-19 [PMID: 36656301]
- Hailiang M, Chisayo K, Ryoya H et al. H2AK119ub1 guides maternal inheritance and zygotic deposition of H3K27me3 in mouse embryos. *Nat Genet*. 2021-04-05 [PMID: 33821003]
- Zhang K, Wang H, Rajput SK et al. Characterization of H3.3 and HIRA expression and function in bovine early embryos. *Mol Reprod Dev* 2017-12-12 [PMID: 29232016]
- Jang C, Shibata Y, Starmer J et al. Histone H3.3 maintains genome integrity during mammalian development. *Genes Dev* 2015-07-01 [PMID: 26159997] (KO, Mouse)
- Pradhan SK, Su T, Yen L et al. EP400 Deposits H3.3 into Promoters and Enhancers during Gene Activation. *Molecular Cell* 2015-12-06 [PMID: 26669263]
- Szenker E, Lacoste N, Almouzni G. A Developmental Requirement for HIRA-Dependent H3.3 Deposition Revealed at Gastrulation in *Xenopus*. *Cell Reports*. 2012-01-01 [PMID: 22813747]
- Drane P, Ouarrhni K, Depaux A et al. The death-associated protein DAXX is a novel histone chaperone involved in the replication-independent deposition of H3.3. *Genes Dev*. 2010-06-15 [PMID: 20504901]
- Orsi GA, Algazeery A, Meyer RE et al. *Drosophila* Yemanuclein and HIRA Cooperate for De Novo Assembly of H3.3-Containing Nucleosomes in the Male Pronucleus. *PLoS Genet*. 2013-02-07 [PMID: 23408912]
- Hammoud SS, Low DH, Yi C et al. Chromatin and Transcription Transitions of Mammalian Adult Germline Stem Cells and Spermatogenesis. *Cell Stem Cell*. 2014-05-14 [PMID: 24835570]
- Jullien J, Astrand C, Szenker E et al. HIRA dependent H3.3 deposition is required for transcriptional reprogramming following nuclear transfer to *Xenopus* oocytes. *Epigenetics Chromatin*. 2012-01-01 [PMID: 23102146] (*Xenopus*)
- More publications at <http://www.novusbio.com/H00003021-M01>





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### **Products Related to H00003021-M01**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
H00003021-P02-10ug	Recombinant Human Histone H3.3B GST (N-Term) Protein

### **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.

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