

# Product Datasheet

## 5-hmC Antibody (AB3/63.3) - BSA Free NBP2-50099

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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**NBP2-50099**

5-hmC Antibody (AB3/63.3) - 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	AB3/63.3
Preservative	0.02% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein G purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Rat 5-hmC Antibody (AB3/63.3) - BSA Free (NBP2-50099) is a monoclonal antibody validated for use in ICC/IF and IP. Anti-5-hmC Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rat
Species	All Species
Specificity/Sensitivity	Expected to detect 5-hydroxymethylcytosine in all species.
Immunogen	5-hmC conjugated to BSA

Product Application Details	
Applications	Dot Blot, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation
Recommended Dilutions	Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Immunoprecipitation 1:10 - 1:500, Dot Blot 1:100 - 1:2000
Application Notes	Positive control(s): Unmodified DNA, 5-Methylcytosine DNA, and 5-hydroxymethylcytosine DNA.

**Publications**

M Kusi, M Zand, LL Lin, M Chen, A Lopez, CL Lin, CM Wang, ND Lucio, NB Kirma, J Ruan, TH Huang, K Mitsuya 2-Hydroxyglutarate destabilizes chromatin regulatory landscape and lineage fidelity to promote cellular heterogeneity Cell Reports, 2022-01-11;38(2):110220. 2022-01-11 [PMID: 35021081]

Cao Z, Zhou N, Zhang Y et al. Dynamic reprogramming of 5-hydroxymethylcytosine during early porcine embryogenesis. Theriogenology. [PMID: 24315686]

Wossidlo et al. 5-Hydroxymethylcytosine in the mammalian zygote is linked with epigenetic reprogramming. Nat Commun. [PMID: 21407207]

Zhang Q, Lei X, Lu H. Alterations of epigenetic signatures in hepatocyte nuclear factor 4 alpha deficient mouse liver determined by improved ChIP-qPCR and (h)MeDIP-qPCR assays. PLoS One [PMID: 24427299] (IP)

Ficz et al. Dynamic regulation of 5-hydroxymethylcytosine in mouse ES cells and during differentiation. Nature [PMID: 21460836] (ICC/IF)





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### **Products Related to NBP2-50099**

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HAF005	Goat anti-Rat IgG Secondary Antibody [HRP]
NB7115	Goat anti-Rat IgG (H+L) Secondary Antibody [HRP]
NBP1-43321-0.5mg	Rat IgG2a Kappa Light Chain Isotype Control (R2a)

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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.

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