

# Product Datasheet

## 5-hmC Antibody NBP2-59184

Unit Size: 50 ug

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

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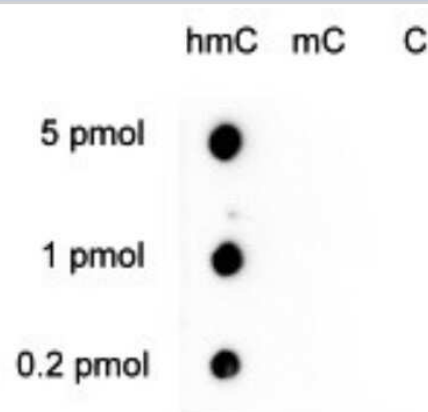
**NBP2-59184****5-hmC Antibody**

| <b>Product Information</b>         |   |
|------------------------------------|---|
| <b>Unit Size</b>                   | 50 ug   |
| <b>Concentration</b>               | Please see the vial label for concentration. If unlisted please contact technical services. |
| <b>Storage</b>                     | Store at -20C. Avoid freeze-thaw cycles.  |
| <b>Clonality</b>                   | Polyclonal  |
| <b>Preservative</b>                | 0.05% Sodium Azide and 0.05% ProClin 300  |
| <b>Isotype</b>                     | IgG   |
| <b>Purity</b>                      | Protein G purified  |
| <b>Buffer</b>                      | PBS   |
| <b>Product Description</b>         |   |
| <b>Host</b>                        | Rabbit  |
| <b>Species</b>                     | Human, Mouse, Xenopus, Zebrafish  |
| <b>Immunogen</b>                   | The exact immunogen is proprietary information.   |
| <b>Product Application Details</b> |   |
| <b>Applications</b>                | Dot Blot, ELISA, Methylated DNA Immunoprecipitation   |
| <b>Recommended Dilutions</b>       | ELISA 1:100 - 1:500, Dot Blot 1:1000, Methylated DNA Immunoprecipitation 3.5 ug/IP          |

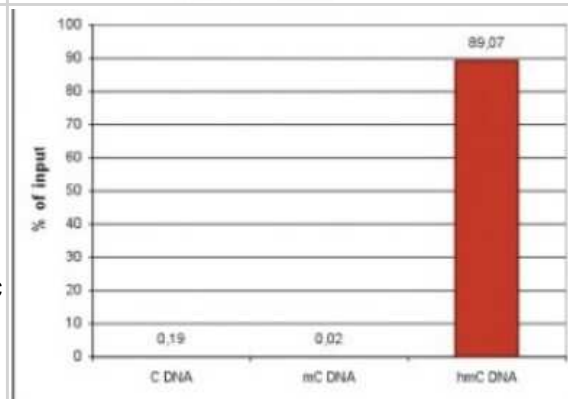


## Images

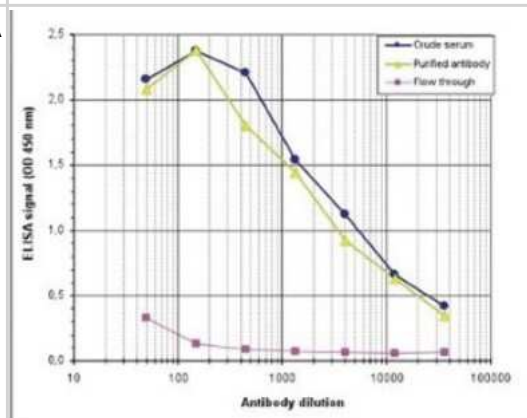
**Dot Blot: 5-hmC Antibody [NBP2-59184]** - To demonstrate the specificity of the antibody against 5-hmC, a Dot blot analysis was performed using hmC, mC and C controls. One hundred to 4 ng (equivalent of 5 to 0.2 pmol of C-bases) of the controls were spotted on a membrane (Amersham Hybond-N+). The antibody was used at a dilution of 1:1,000. Figure shows a high specificity of the antibody for the hydroxymethylated control.



**Methylated DNA Immunoprecipitation: 5-hmC Antibody [NBP2-59184]** - hMeDIP (hydroxymethylated DNA IP) was performed using the antibody against 5-hydroxymethylcytosine. DNA from mouse ES cells was prepared and sonicated to obtain DNA fragments of 300-500 bp. One ug of sheared DNA was spiked with the unmethylated (C) methylated (mC), and hydroxymethylated (hmC) controls. hMeDIP was performed with 3.5 ug of the rabbit 5-hmC antibody and the IP'd DNA was analysed by qPCR using primers specific for the 3 different control sequences. Figure shows that the rabbit polyclonal antibody against 5-hmC is highly specific for the 5-hmC base modification (no IP with non-methylated or methylated C control fragments).



**ELISA: 5-hmC Antibody [NBP2-59184]** - To determine the titer, an ELISA was performed using a serial dilution of the antibody directed against 5-hmC, crude serum and flow through, in antigen coated wells. The antigen used was the 5-hmC base coupled to BSA. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:2,800.





### **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

### **Products Related to NBP2-59184**

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|            |   |
|------------|---|
| HAF008     | Goat anti-Rabbit IgG Secondary Antibody [HRP]       |
| NB7160     | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891 | Rabbit IgG Isotype Control                          |

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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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