

## 5-Hydroxymethylcytosine / 5-hmC antibody [GT13612]

**Cat. No. GTX629765**

<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG2b
<b>Applications</b>	ICC/IF, IHC-P, Dot, EM, MeDIP
<b>Reactivity</b>	Species independent

References ( 11 )

★★★★★ Review ( 1 )

Package

100 µl, 25 µl

## PRODUCT

**Summary**

5-hmC antibody recognizes 5-Hydroxymethylcytosine (5-hmC), which is referred to as a "sixth base" of mammalian genomic DNA. 5-hmC is thought to be an epigenetic regulatory modification in its own right, while also being the product of the first TET protein-catalyzed oxidation of 5-methylcytosine in the DNA demethylation pathway.

## Applications

**Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
ICC/IF	Assay dependent
IHC-P	1:100-1:1000
Dot	Assay dependent
EM	Assay dependent
MeDIP	Assay dependent

Not tested in other applications.

## Properties

<b>Form</b>	Liquid
<b>Buffer</b>	PBS
<b>Preservative</b>	No preservatives
<b>Storage</b>	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
<b>Concentration</b>	0.81 mg/ml (Please refer to the vial label for the specific concentration.)
<b>Immunogen</b>	The immunogen used to generate this antibody corresponds to 5-HydroxymethylCytosine / 5-hmC
<b>Purification</b>	Purified by antigen-affinity chromatography.
<b>Conjugation</b>	Unconjugated

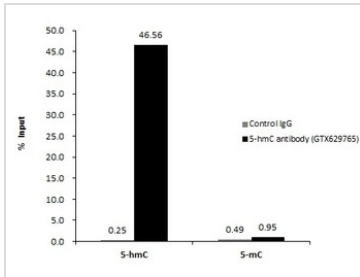


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For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

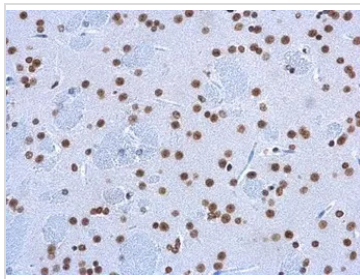
**Note**  
 Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.

DATA IMAGES



**GTX629765 MeDIP Image**

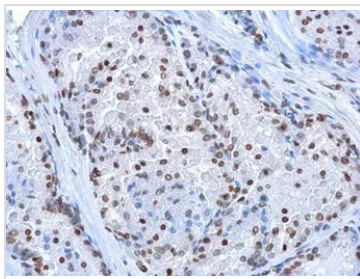
GTX629765 5-Hydroxymethylcytosine / 5-hmC antibody [GT13612] in MeDIP experiment. Human genomic DNA (500 ng) mixed with methylated cytosine standard kit (GTX400004) were subjected to MeDIP with 5-Hydroxymethylcytosine / 5-hmC antibody [GT13612] (GTX629765) at dilution of 1:500 and analyzed with semi-quantitative PCR. The immunoprecipitated DNA was plotted as % of input DNA.



**GTX629765 IHC-P Image**

5-Hydroxymethylcytosine / 5-hmC antibody [GT13612] detects 5-HydroxymethylCytidine protein at nucleus on mouse testis by immunohistochemical analysis. Sample: Paraffin-embedded mouse testis. 5-Hydroxymethylcytosine / 5-hmC antibody [GT13612] (GTX629765) dilution: 1:100.

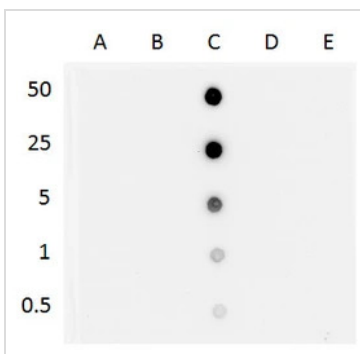
Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min



**GTX629765 IHC-P Image**

5-Hydroxymethylcytosine / 5-hmC antibody [GT13612] detects 5-HydroxymethylCytidine protein at nucleus on mouse prostate by immunohistochemical analysis. Sample: Paraffin-embedded mouse prostate. 5-Hydroxymethylcytosine / 5-hmC antibody [GT13612] (GTX629765) dilution: 1:100.

Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min



**GTX629765 Dot Image**

GTX629765 5-hydroxymethylcytosine antibody [GT13612] Dot blot analysis of anti-5-hmC antibody with the synthetic DNA controls (GTX400004). DNA samples (0.5 to 50 ng as indicated) were spotted onto the positively charged Nylon membrane and blotted with 5-hmC antibody (GTX629765) at a dilution of 1:500.

- A: Unmethylated DNA fragment
- B: DNA fragment containing 5-methylcytosine
- C: DNA fragment containing 5-hydroxymethylcytosine
- D: DNA fragment containing 5-formylcytosine
- E: DNA fragment containing 5-carboxylcytosine



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