

5-Hydroxymethylcytosine / 5-hmC antibody [GT13612]

Cat. No. GTX629765

Host	Mouse
Clonality	Monoclonal
Isotype	lgG2b
Applications	ICC/IF, IHC-P, IHC-Fr, Dot, EM, MeDIP
Reactivity	Species independent



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
IHC-Fr	Assay dependent
Dot	Assay dependent
EM	Assay dependent
MeDIP	Assay dependent

Not tested in other applications.

Properties	
Form	Liquid
Buffer	PBS
Preservative	No preservatives
Storage	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.
Concentration	0.81 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	The immunogen used to generate this antibody corresponds to 5-HydroxymethylCytosine / 5-hmC
Purification	Purified by antigen-affinity chromatography.
Conjugation	Unconjugated



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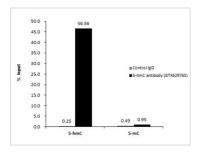


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Note

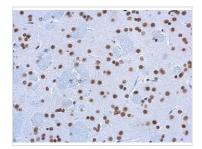
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DATA IMAGES



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.



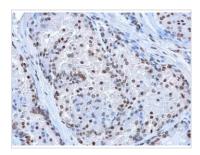
GTX629765 IHC-P Image

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



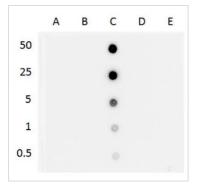
GTX629765 IHC-P Image

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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