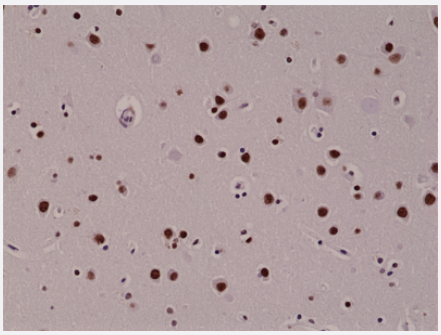
RecomAb™

# 5-hydroxymethylcytosine (5-hmC) monoclonal antibody, clone RM236

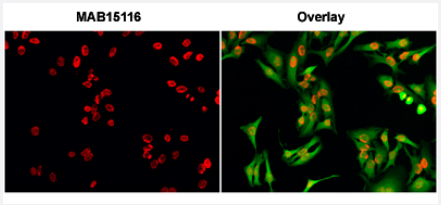
Catalog # MAB15116 Size 50 ug

## Applications



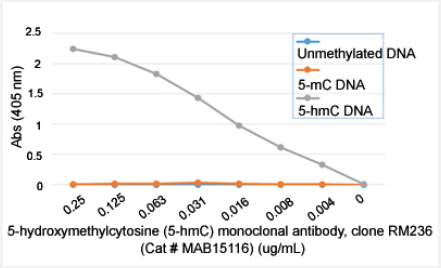
### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human brain with 5-hydroxymethylcytosine (5-hmC) monoclonal antibody, clone RM236 (Cat # MAB15116).




### Immunocytochemistry

Immunocytochemistry staining of HeLa cells with 5-hydroxymethylcytosine (5-hmC) monoclonal antibody, clone RM236 (Cat # MAB15116) (Red). Actin filaments was labeled with fluorescein phalloidin (Green).




### Enzyme-linked Immunoabsorbent Assay

ELISA analysis of single stranded DNA with 5-hydroxymethylcytosine (5-hmC) monoclonal antibody, clone RM236 (Cat # MAB15116). The plate was coated with streptavidin and then biotinylated single stranded unmethylated DNA, 5-Methylcytosine (5-mC) DNA, and 5-Hydroxymethylcytosine (5-hmC) DNA. A serial dilution of MAB15116 was used as the primary antibody, and an alkaline phosphatase conjugated anti-rabbit IgG as the secondary antibody.

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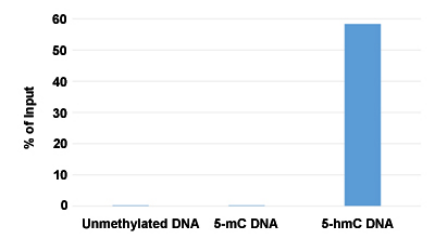
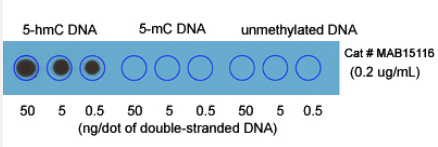



## Methylated DNA Immunoprecipitation

Hydroxymethylated DNA immunoprecipitation (hMeDIP) analysis of 5-hydroxymethylcytosine (5-hmC) monoclonal antibody, clone RM236 (Cat # MAB15116) at a 10:1 DNA:Ab ratio. 1 ng of unmethylated, 5-Methylcytosine (5-mC) or 5-Hydroxymethylcytosine (5-hmC) DNA standard (897 bp) was spiked in 1 ug of genomic DNA isolated from HeLa cells as the control. Realtime PCR was then performed to determine the capture of DNA standard as in % of input.




## Dot Blot

Dot blot analysis of double stranded DNA with 5-hydroxymethylcytosine (5-hmC) monoclonal antibody, clone RM236 (Cat # MAB15116). The membrane was pre-spotted with 50, 5, and 0.5 ng/dot of double stranded 5-Hydroxymethylcytosine (5-hmC) DNA, 5-Methylcytosine (5-mC) DNA, and unmethylated DNA. The pre-spotted membrane was then blotted with MAB15116.

## Specification

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|---|---|
| **Product Description** | Rabbit recombinant monoclonal antibody raised against 5-hydroxymethylcytosine (5-hmC). |
| **Antibody Species** | Rabbit |
| **Immunogen** | Original antibody is raised against 5-hydroxymethylcytosine conjugated with BSA. |
| **Sequence** | N/A |
| **Specificity** | This antibody reacts to 5-hydroxymethylcytosine in both single-stranded and double-stranded DNA. N o cross reactivity with non-methylated cytosine and methylcytosine in DNA. |
| **Form** | Liquid |
| **Purification** | Protein A affinity purification |
| **Isotype** | IgG |
| **Recommend Usage** | Dot Blot (0.2-1 ug/mL)<br>ELISA (0.1-1 ug/mL)<br>Immunocytochemistry (0.5-2 ug/mL)<br>Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.1-1 ug/mL)<br>Hydroxymethylated DNA immunoprecipitation (0.2-2 ug/mL)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS (50% glycerol, 1% BSA, 0.09% sodium azide) |

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|---|---|
| **Storage Instruction** | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

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