

# 5-Methylcytosine (5mC) Rabbit mAb

Catalog No.: A20599

Recombinant

1 Publications

## Basic Information

**Observed MW****Calculated MW****Category**

Primary antibody

**Applications**

ELISA,DB

**Cross-Reactivity**

Species independent

**CloneNo number**

ARC50801

## Background

In the mammalian genome, DNA methylation is an epigenetic mechanism involving the transfer of a methyl group onto the C5 position of the cytosine to form 5-methylcytosine. DNA methylation regulates gene expression by recruiting proteins involved in gene repression or by inhibiting the binding of transcription factor(s) to DNA. During development, the pattern of DNA methylation in the genome changes as a result of a dynamic process involving both de novo DNA methylation and demethylation. As a consequence, differentiated cells develop a stable and unique DNA methylation pattern that regulates tissue-specific gene transcription. Intriguingly, postmitotic neurons still express DNA methyltransferases and components involved in DNA demethylation. Moreover, neuronal activity can modulate their pattern of DNA methylation in response to physiological and environmental stimuli. The precise regulation of DNA methylation is essential for normal cognitive function.

## Recommended Dilutions

DB 1:500 - 1:1000

## Immunogen Information

**Gene ID****Swiss Prot****Immunogen**

5mC

**Synonyms**

5mC; 5-Methylcytosine (5mC)

## Contact

 | [www.abclonal.com](http://www.abclonal.com)

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

Affinity purification

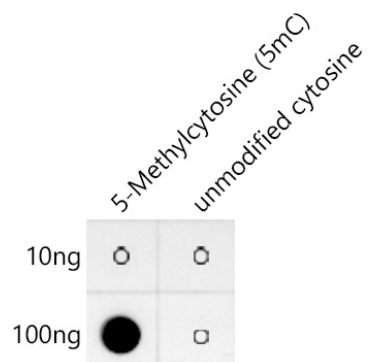
**Storage**

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

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

## Validation Data

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Dot-blot analysis of 5-Methylcytosine (5mC) and unmodified cytosine using 5-Methylcytosine (5mC) Rabbit mAb antibody (A20599) at 1:1000 dilution.

5-Methylcytosine (5mC) :

Biotin-5'CGATAACCACTAGT(5mC)3'

unmodified cytosine :

Biotin-5'CGATAACCACTAGTC3'