

Anti-5-Methylcytosine Rabbit Monoclonal Antibody

08/21

CATALOG NO.: **A2364-50 (50 µl)**
A2364-100 (100 µl)

BACKGROUND DESCRIPTION: Methylation of DNA at cytosine residues is a heritable, epigenetic modification that is critical for regulation of gene expression, imprinting, and development. 5-methylcytosine is a repressive epigenetic marker initiated and maintained by DNA methyltransferase (DNMT) enzymes. Cancer cell genomes often undergo global hypomethylation, while hypermethylation may occur at CpG islands associated with promoters of tumor suppressor genes.

ALTERNATE NAMES: 5-mC

ANTIBODY TYPE: Monoclonal

CLONE: D3S2Z

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: 5-methylcytidine

FORM: Liquid

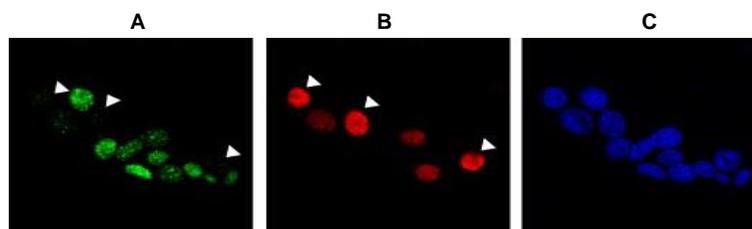
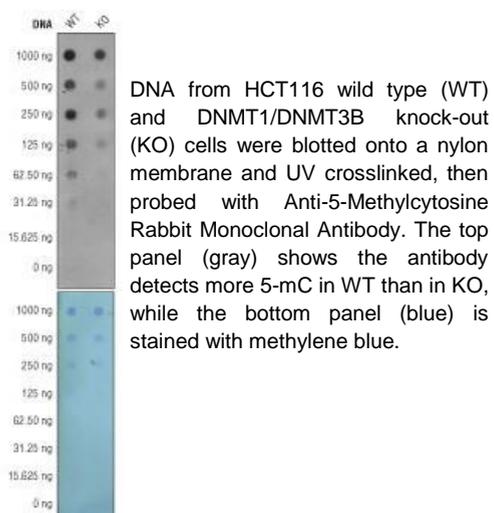
FORMULATION: In 10 mM HEPES pH 7.5, 150 mM NaCl, 100 µg/mL BSA, 50% glycerol, < 0.02% sodium azide

SPECIES REACTIVITY: All species

STORAGE CONDITIONS: Store at -20 °C. Do not aliquot

APPLICATIONS: Immunofluorescence: 1:1600 dilution; DNA dot blot: 1:1000 dilution

This information is only intended as a guide. The optimal dilutions must be determined by the user



Immunofluorescence analysis of 293T cells transfected with a construct expressing FLAG-tagged TET1 catalytic domain using Anti-5-Methylcytosine Rabbit Monoclonal Antibody. The 5-mC staining (**A**) using the antibody shows that less 5-mC is visualized when the cell expresses the TET1 (visualized in **B**), see white arrows in diagram) that oxidizes 5-mC into 5-hydroxymethylcytosine. DAPI staining is used to visualize all nuclei in (**C**).

RELATED PRODUCTS:

Anti-5-Hydroxymethylcytosine Antibody (4D9) (Cat. No. A1295).
 DNMT2 Antibody (Cat. No. 3488).
 MeCP2 Antibody (Cat. No. 3199).
 DNMT1 Antibody (Cat. No. 3946).
 5-hmC Polyclonal Antibody (Rabbit) (Cat. No. 6830).

FOR RESEARCH USE ONLY! Not to be used on humans.