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Data Sheet

Anti-3-mC polyclonal antibody Catalog #: 25200

Lot #: 150728	Host Species: Rabbit
Conc.: 50 µg/28 µl	Species Reactivity: Human, Mouse, broad range
Size: 50 µg	Immunogen: Synthetic peptide
Clonality: Polyclonal	Purification: Protein G purified

Description: Polyclonal antibody raised in rabbit against 3-methylcytosine (3-mC) conjugated to BSA.

Background: 3-methylcytosine arises by erroneous methylation of DNA through spontaneous exposure to endogenous S-adenosyl methionine (SAM). Since the N3-position in cytosine is protected in double stranded DNA, this phenomenon mainly occurs in single stranded DNA. The resulting 3-mC is toxic and mutagenic and increased levels of 3-mC seem to impair cell proliferation. Therefore, it has to be repaired by the cell. This is established by oxidative demethylation, which is catalyzed by the AlkB protein.

Formulation: PBS containing 0.05% azide and 0.05% ProClin 300.

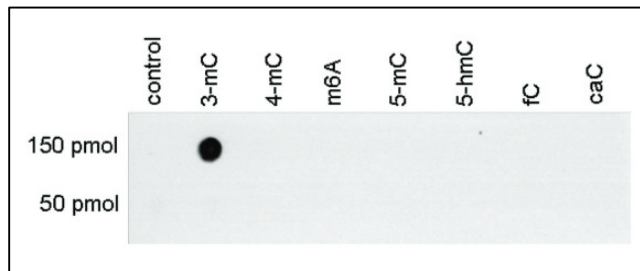
Applications: DB (1:400)

Storage/Stability: Store at -80°C for up to 2 years. Centrifuge after first thaw to maximize product recovery. Aliquot to avoid repeated freeze/thaw cycles. Aliquots may be stored at -20°C for at least one month..

Warnings: Avoid freeze/thaw cycles

Notes: The optimal antibody concentration should be determined by the end-user.

Quality Assurance:



Dot blot analysis using the antibody directed against 3-mC. To demonstrate the specificity of the antibody against 3-mC (cat. No. 25200), a Dot Blot analysis was performed using synthetic oligonucleotides containing different modified bases. 150 and 50 pmol of the respective oligo's were spotted on the membrane. The antibody was diluted 1:400 in PBS-T containing 10 % skimmed milk and 1% BSA. Figure 1 shows a high specificity of the antibody for the oligonucleotide with the 3-methylcytosine modification.