

3-mC polyclonal antibody

Full name: 3-methylcytosine polyclonal antibody

Cat. No. C15410209

Type: Polyclonal

Source: Rabbit

Lot #: A2111-0010

Size: 50 µg/28 µl

Concentration: 1.80 µg/µl

Specificity: Human, mouse, other (wide range): positive

Purity: Protein G purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

Applications

	Suggested dilution	Results
Dot Blot	1:400	Fig 1

*The optimal dilution for other applications should be determined by the end user. For WB we suggest starting with a 1:500 dilution

Target description

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.

Results

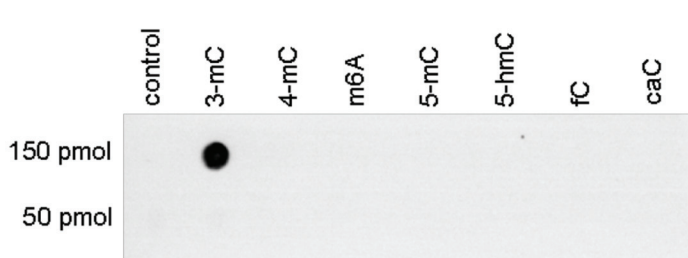


Figure 1. Dot blot analysis using the Diagenode antibody directed against 3-mC

To demonstrate the specificity of the Diagenode antibody against 3-mC (cat. No. C15410209), 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.

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