

AbFlex[®] 5-methylcytosine antibody (rAb)

Catalog Nos: 91187, 91188

RRID: AB_2793794

Isotype: IgG2a

Application(s): DB

Reactivity: Not Species Specific

Quantities: 100 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse

Concentration: 1 µg/µl

Background: AbFlex[®] antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports.

AbFlex[®] 5-methylcytosine (5-mC) antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells. 5-Methylcytosine (5-Methylcytidine) is a modified base that is found in the DNA of plants and vertebrates. DNA methylation is an epigenetic event in which DNA methyltransferases (DNMTs) catalyze the reaction of a methyl group to the fifth carbon of cytosine in a CpG dinucleotide. This modification helps to control gene expression and is also involved in genomic imprinting, while aberrant DNA methylation is often associated with disease. This antibody is useful for discrimination between the modified base and its normal cytosine counterpart, allowing for gene promoter methylation analysis.

Immunogen: This antibody was raised against 5-methylcytosine conjugated to KLH.

Buffer: Purified IgG in 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, 30% glycerol. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

Dot Blot: 1 µg/ml

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Dot blot of AbFlex[®] 5-methylcytosine antibody (rAb). DNA standards from Cat# 55008 (5, 1 and 0.2 ng as indicated) were spotted onto positively charged nylon membrane and blotted with AbFlex 5-methylcytosine recombinant antibody at a 1 µg/mL. Lane 1: Unmethylated DNA. Lane 2: DNA containing 5-methylcytosine. Lane 3: DNA containing 5-hydroxymethylcytosine.