

5-mC monoclonal antibody

Cat. No. C15200006

Type: Monoclonal MeDIP-grade

Isotype: IgG1

Source: Mouse

Lot #: GF-005

Size: 100 µg/48 µl • 500 µg/238 µl

Concentration: 2.1 µg/µl

Specificity: Human, mouse, cow, alligator, zebrafish, plants, wide range expected.

Purity: Monoclonal antibody purified by gel filtration, in PBS containing 0.05% azide.

Storage: Store in small aliquots 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: Monoclonal antibody raised in mouse against 5-mC (5-methylcytosine) conjugated to ovalbumine.

Applications

	Suggested dilution	Results
MeDIP	0.5 - 1 µg per IP	Fig 1
Immunofluorescence	1:1,000	Fig 3

* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 0.5-5 µg per IP.

Results

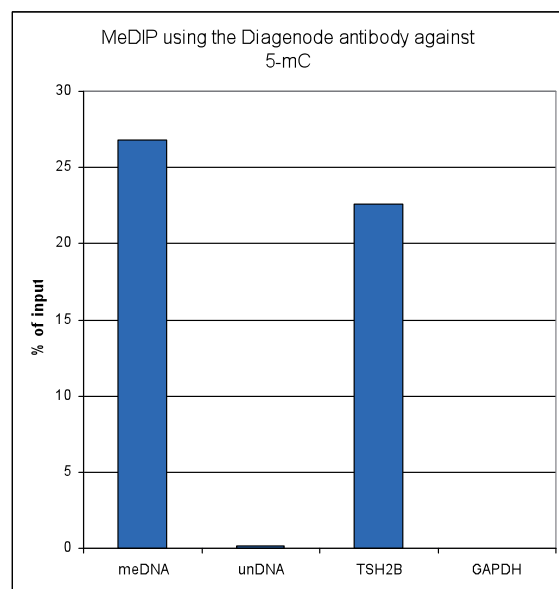


Figure 1. Methylated DNA immunoprecipitation (MeDIP) results obtained with the Diagenode monoclonal antibody directed against 5-mC

MeDIP (Methylated DNA immunoprecipitation) was performed on 1 µg fragmented human genomic DNA using 0.2 µg of the Diagenode monoclonal antibody against 5-mC (Cat. No. C15200006) and the MagMeDIP Kit (Cat. No. C02010021). The fragmented DNA was spiked with the internal controls present in the kit (methylated DNA (meDNA) as a positive and unmethylated DNA (unDNA) as a negative control) prior to performing the IP.

qPCR was performed with optimized primer sets, included in the kit, specific for the methylated and unmethylated DNA controls, and for a known methylated (TSH2B) and unmethylated (GAPDH) genomic region. Figure 2 shows the recovery expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

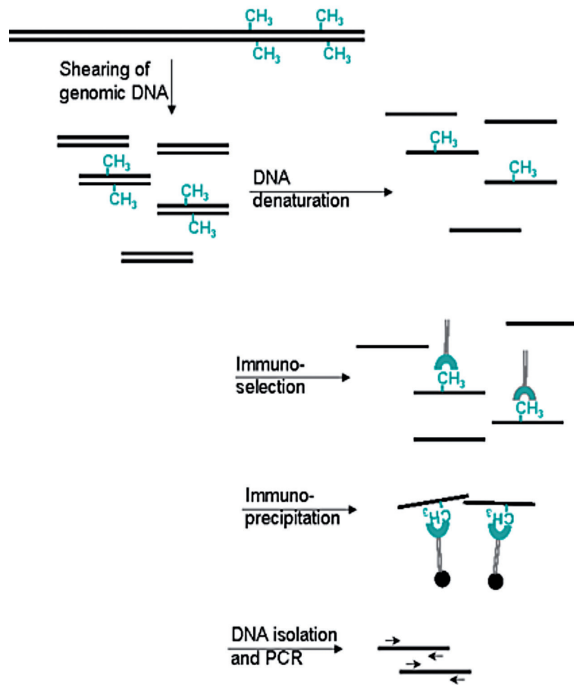


Figure 2. Methylated DNA immunoprecipitation (MeDIP) method

- Prepare genomic DNA from cultured cells
- Shear genomic DNA
- Denature the sheared genomic DNA
- Immunoprecipitate with the antibody against 5-meC
- Isolate DNA and perform PCR

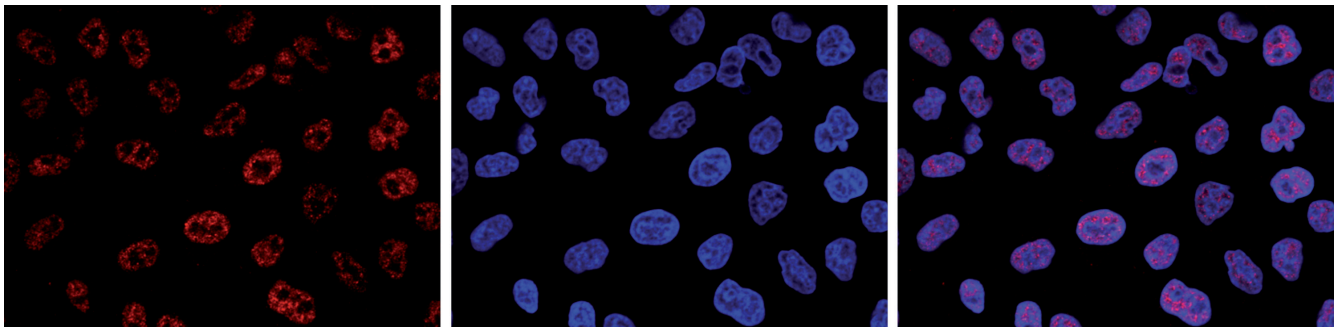


Figure 3. Immunofluorescence using the Diagenode monoclonal antibody directed against 5-mC

HeLa cells were stained with the Diagenode antibody against 5-mC (Cat. No. C15200006) and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 1% BSA. The cells were immunofluorescently labelled with the 5-mC antibody (left) diluted 1:1,000 in blocking solution followed by an anti-mouse antibody conjugated to Alexa594. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.

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