

5-methylcytosine (5-mC) Antibody - cl. b

Cat. No. C15200006-100

Type: Monoclonal MEDIP-grade	Specificity: Human, mouse, rat, cow, alligator, zebrafish, plants, finch, wide range expected.
Size: 100 µg	Isotype: IgG1
Concentration: 2.1 µg/µl	Host: Mouse
Lot No.: GF-005	Purity: Monoclonal antibody purified by gel filtration.
Storage buffer: PBS containing 0.05% azide.	Storage conditions: 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.	

Last Data Sheet Update: February 11, 2019

Description

Monoclonal antibody raised in mouse against **5-mC (5-methylcytosine)** conjugated to ovalbumine.

Applications

Applications	Suggested dilution	References
MeDIP	0.5 - 1 µg/IP	Fig 1, 2
Immunofluorescence	1:1,000	Fig 3

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

Validation Data

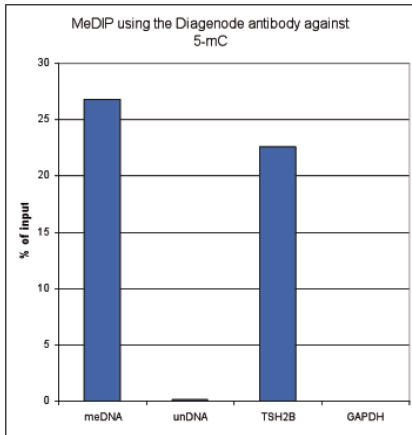


Figure 1. Methylated DNA immunoprecipitation (MeDIP) results obtained with the Diagenode monoclonal antibody directed against 5-mC

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).

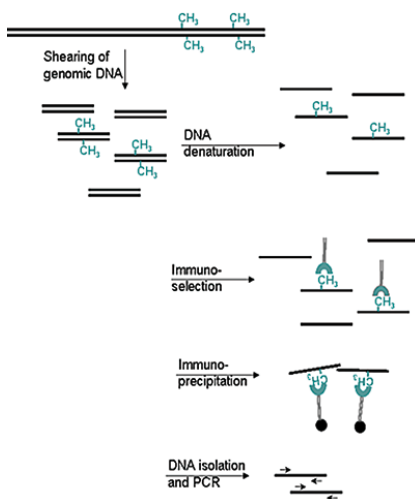


Figure 2. Methylated DNA immunoprecipitation (MeDIP) method

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

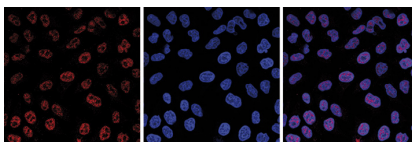


Figure 3. Immunofluorescence using the Diagenode monoclonal antibody directed against 5-mC

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.