

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

**Cat. No. C15200006**

Type: Monoclonal <b>MEDIP-grade</b>	Specificity: Human, mouse, rat, cow, alligator, zebrafish, plants, finch, wide range expected.
Size: 100 µg	Isotype: IgG1
Concentration: 2.6 µg/µl	Host: Mouse
Lot No.: 006	Purity: Protein A purified monoclonal antibody
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: November 17, 2020

### Description

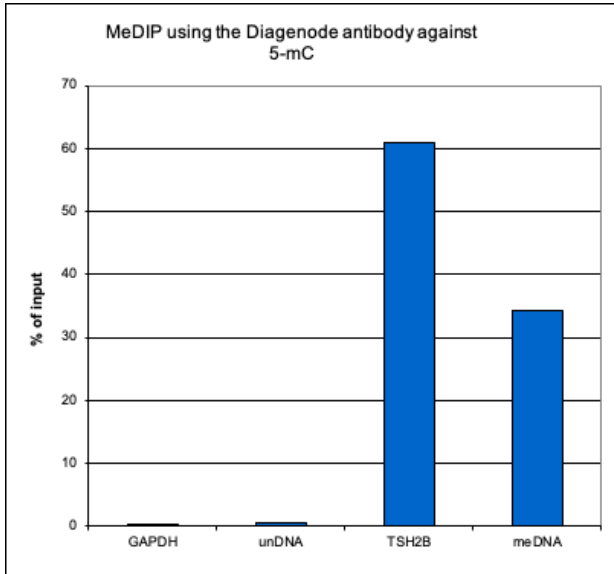
Monoclonal antibody raised in mouse against **5-mC (5-methylcytosine)** conjugated to ovalbumine.

### Applications

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

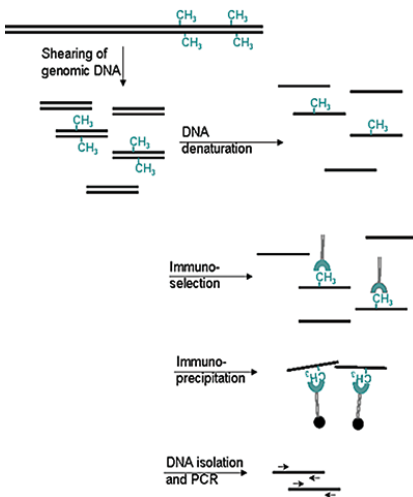
\* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 0.2-5 µg per IP.

**Validation Data**



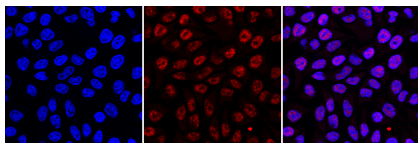
**Figure 1. Methylated DNA immunoprecipitation (MeDIP) results obtained with the Diagenode monoclonal antibody directed against 5-mC**

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 (middle) diluted 1:1,000 in blocking solution followed by an anti-mouse antibody conjugated to Alexa594. The left panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.