

5-mC antibody

Cat. No. C15200006

Lot:	007
Size:	500 µg
Type:	Monoclonal
Isotype:	IgG1
Source:	Mouse
Concentration:	2.6 µg/µl

Specificity:	Human, mouse, rat, cow, alligator, zebrafish, finch, plants, wide range expected
Purity:	Protein A purified monoclonal antibody
Storage buffer:	PBS containing 0.05% azide

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

Applications

Applications	Suggested dilution	References
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 0.2-5 µg per IP

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Results

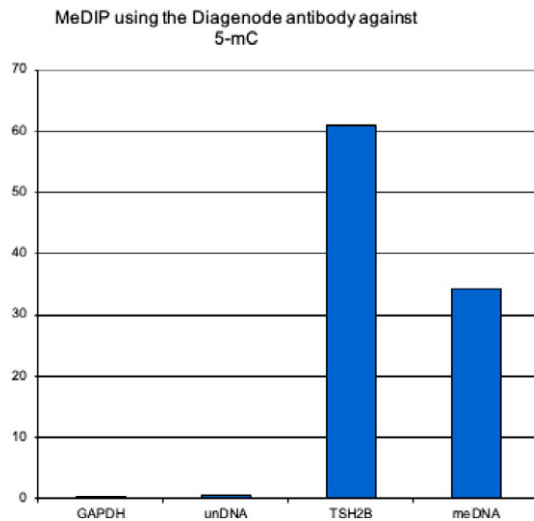


Figure 1: Methylated DNA immunoprecipitation (MeDIP) results obtained with the Hologic Diagenode monoclonal antibody directed against 5-mC

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).

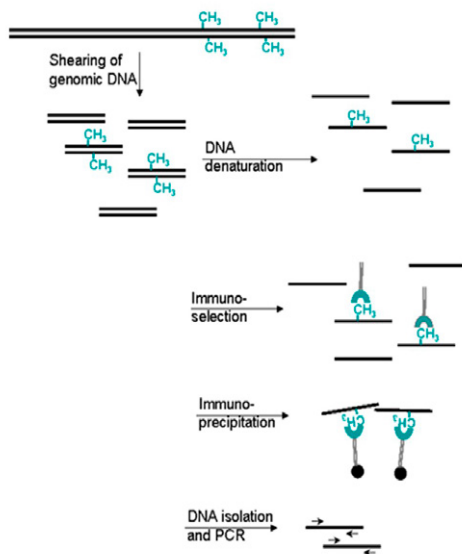


Figure 2: Methylated DNA immunoprecipitation (MeDIP) method

- 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

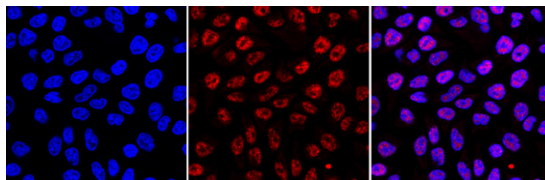


Figure 3: Immunofluorescence using the Hologic Diagenode monoclonal antibody directed against 5-mC

HeLa cells were stained with the Hologic 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.