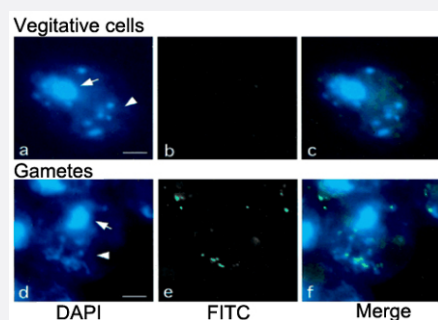


# 5-Methylcytosine monoclonal antibody, clone 5MC-CD

Catalog # MAB6766      Size 100 ug

## Applications



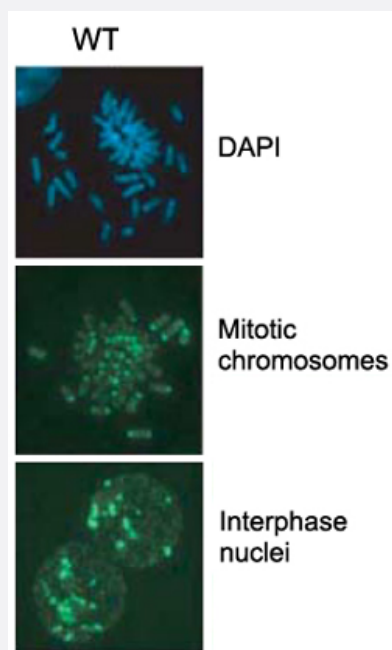
### Immunofluorescence

Methylation of chloroplast DNA visualized by immunochemistry. Samples are *Chlamydomonas me-1* cells.

Left : DAPI-stained cells.

Middle : Cells stained with 5-Methylcytosine monoclonal antibody, clone 5MC-CD (Cat # MAB6766) and FITC-conjugated 2nd antibody.

Right : Merged image Chloroplast DNA is exclusively methylated in gamete cells.



### Immunofluorescence

Detection of DNA methylation in mouse embryonic stem cells by immunofluorescence staining with the 5-Methylcytosine monoclonal antibody, clone 5MC-CD (Cat # MAB6766). Intense 5-methylcytosine staining at pericentromeric regions was seen in the mitotic chromosome and interphase nuclei of ESCs.

## Specification

**Product Description** Mouse monoclonal antibody raised against 5-Methylcytosine.

**Immunogen** 5-Methylcytosine conjugated with BSA.

Host	Mouse
Form	Liquid
Isotype	IgM
Recommend Usage	Immunocytochemistry (1:50-1:100) Western Blot (~1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol).
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

## Applications

- Immunocytochemistry

- Immunofluorescence

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## Publication Reference

- [The SRA protein Np95 mediates epigenetic inheritance by recruiting Dnmt1 to methylated DNA.](#)

Sharif J, Muto M, Takebayashi S, Suetake I, Iwamatsu A, Endo TA, Shinga J, Mizutani-Koseki Y, Toyoda T, Okamura K, Tajima S, Mitsuya K, Okano M, Koseki H.

Nature 2007 Dec; 450(7171):908.

Application: IF, Human, Human embryonic stem cells

- [A chloroplast-resident DNA methyltransferase is responsible for hypermethylation of chloroplast genes in Chlamydomonas maternal gametes.](#)

Nishiyama R, Ito M, Yamaguchi Y, Koizumi N, Sano H.

PNAS 2002 Apr; 99(9):5925.

Application: IF, Chlamydomonas reinhardtii, me-1 cells

- [Detection of heavy methylation in human repetitive DNA subsets by a monoclonal antibody against 5-methylcytosine.](#)

Sano H, Imokawa M, Sager R.

Biochimica et Biophysica Acta 1988 Nov; 951(1):157.

Application: AFC, IA, Bovine, Human, Bovine nuclear DNA, Human lymphocytes DNA