

DNA Methyltransferase 1 (Clone 60B1220.1) Monoclonal Antibody

ALTERNATE NAMES:	DNMT1
CATALOG #:	6110-50
AMOUNT:	50 µg
HOST:	Mouse
ISOTYPE:	IgG _{1κ}
IMMUNOGEN:	Synthetic peptide corresponding to amino acids 637-650 (EKDDREDKENAFKR) of human DNMT1
PURIFICATION:	Antigen Affinity purified
FORMULATION:	50 µg of antibody in 100 µl PBS containing 0.05% BSA and 0.05% sodium azide.
SPECIES REACTIVITY:	Human, Mouse, Zebrafish
STORAGE CONDITIONS:	Can be stored at 4°C for 6 months. For long term storage, store at -20°C. Avoid freeze/thaw cycles.

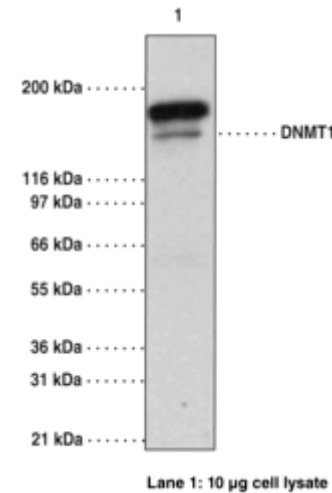
DESCRIPTION: Methylation of DNA at cytosine residues plays an important role in regulation of gene expression, genomic imprinting, and is essential for mammalian development. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked with development of cancer. To date, three families of mammalian DNA methyltransferase genes have been identified which include DNMT1, DNMT2, and DNMT3. DNMT1 is constitutively expressed in proliferating cells and inactivation of this gene causes global demethylation of genomic DNA and embryonic lethality. DNMT1 co-purifies with the retinoblastoma (Rb) tumour suppressor gene product, E2F1, and HDAC1. DNMT1 also cooperates with Rb to repress transcription from promoters containing E2F-binding sites suggesting a link between DNA methylation, histone deacetylase, and sequence-specific DNA binding activity, as well as a growth-regulatory pathway that is disrupted in nearly all cancer cells.

SPECIFICITY: Human, Mouse, and zebrafish DNMT1

APPLICATION: Western blot: 2-4 µg/ml. IHC (paraffin-embedded sections), ChIP, and IP: 1-2 µg/ml.

Note: *This information is only intended as a guide. The optimal dilutions must be determined by the user*

04/13



WB using DNMT1 mAb.

RELATED PRODUCTS:

- DNMT1 Antibody (**Cat. No. 3946-100**)
- DNA Methyltransferase 2 Polyclonal Antibody (**Cat. No. 6111-50**)
- DNA Methyltransferase 2 Monoclonal Antibody (**Cat. No. 6112-50**)
- DNA Methyltransferase 3a Monoclonal Antibody (**Cat. No. 6113-50**)
- DNA Methyltransferase 3b Monoclonal Antibody (**Cat. No. 6114-50**)
- DNA Methyltransferase 3a Monoclonal Antibody (**Cat. No. 6115-50**)
- PRMT-5 Antibody (**Cat. No. 3935-100**)
- PRMT1 Antibody (**Cat. No. 3792-100**)
- PRMT6 Antibody (**Cat. No. 3086-100**)
- PRMT7 Antibody (**Cat. No. 3059-100**)

FOR RESEARCH USE ONLY! Not to be used on humans.