

DNA Methyltransferase 3a (Clone 64B814.1) Monoclonal Antibody

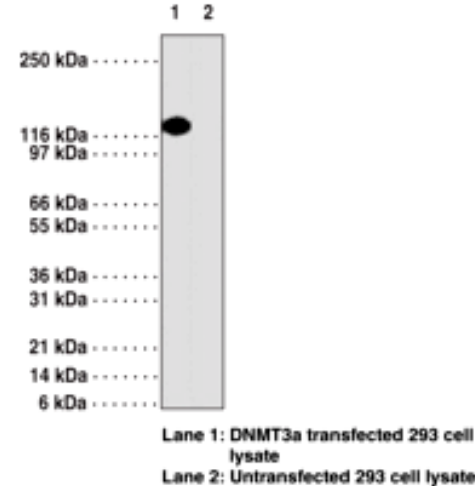
ALTERNATE NAMES:	DNMT3
CATALOG #:	6113-50
AMOUNT:	50 µg
HOST:	Mouse
ISOTYPE:	IgG _{1κ}
IMMUNOGEN:	Recombinant mouse His-tagged DNMT3a expressed in bacteria
PURIFICATION:	Protein G purified
FORMULATION:	50 µg of antibody in 100 µl PBS containing 0.05% BSA and 0.05% sodium azide.
SPECIES REACTIVITY:	Human, Mouse
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. DNMT2 is expressed at low levels in adult tissues and its inactivation does not affect DNA methylation or maintenance of methylation. The DNMT3 family members, DNMT3a and DNMT3b, are strongly expressed in embryonic stem (ES) cells but their expression is down regulated in differentiating ES cells and is low in adult somatic tissue. Recently, it has been shown that naturally occurring mutations of DNMT3b gene occur in patients with a rare autosomal recessive disorder, termed ICF (immunodeficiency, centromeric instability, and facial anomalies) syndrome.

SPECIFICITY: Human and Mouse DNMT3a

APPLICATION: Western blot: 1-3 µg/ml, IF/ICC: 5 µg/ml

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



WB using DNMT3a mAb.

RELATED PRODUCTS:

- DNMT1 Antibody (Cat. No. 3946-100)
- DNA Methyltransferase 1 Monoclonal Antibody (Cat. No. 6110-50)
- DNA Methyltransferase 2 Polyclonal Antibody (Cat. No. 6111-50)
- DNA Methyltransferase 2 Monoclonal Antibody (Cat. No. 6112-50)
- 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.