DNMT3A antibody (mAb)

Catalog No: 39206
RRID: AB_2722512
Clone: 64B1446
Isotype: IgG1k
Application(s): ChIP, IHC, WB
Reactivity: Human, Mouse

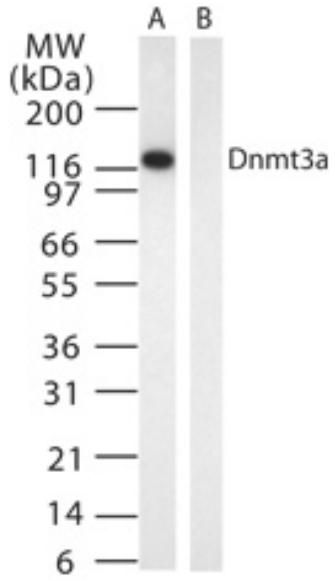
Quantity: 100 µg
Purification: Protein G Chromatography
Host: Mouse
Concentration: 1 µg/µl
Molecular Weight: 116 kDa

Background: DNMT3A – DNA methyltransferase proteins such as DNMT3A (or DNMT 3A) are involved in DNA methylation, in which a methyl group is added to a cytosine residue on DNA, commonly at the C5 position of a CpG dinucleotide. DNMT3A has been shown to be important in the regulation of specific patterns of DNA methylation. Methylation of mammalian DNA has long been recognized to play a major role in a number of cellular functions such as embryonic development, genetic imprinting, X chromosome inactivation and control of gene expression. DNA methylation is generally associated with transcriptional repression.

Three families of DNMTs have been identified: DNMT1, DNMT2 and DNMT3. The DNMT3 family, containing two active methyltransferases, DNMT3A & DNMT3B, and one DNMT3-Like protein (DNMT3L), establishes the initial CpG methylation pattern *de novo* and shows the same propensity for methylating unmethylated duplex DNA as for hemi-methylated DNA. DNMT3A and DNMT3B are encoded by two distinct genes and are strongly expressed in embryonic stem cells. DNMT3A is ubiquitous in mammalian cells.

Immunogen: This DNMT3A antibody was raised against a full-length protein corresponding to mouse DNMT3A.

Buffer: PBS containing 0.05% sodium azide. Sodium azide is highly toxic.



DNMT3A mAb tested by Western blot.
Detection of DNMT3A by Western blot. The analysis was performed using DNMT3A mAb at a 2 µg/ml dilution and whole-cell extracts from 293 cells that had been transfected with plasmid expressing either mouse DNMT3A (lane A) or DNMT3B (lane B).

Application Notes:
Validated Applications:
WB: 2 - 4 µg/ml dilution

Individual optimization may be required.

For optimal results, primary antibody incubations should be performed at room temperature. The addition of 0.1% Tween 20 to all Blotto solutions may also reduce background. Individual optimization may be required.

Published Applications:
ChIP
IHC

See references for more information.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years.