

DNMT3A dimethyl Lys44 antibody (pAb)

Catalog Nos: 61323, 61324

RRID: AB_2793591

Isotype: IgG

Application(s): WB

Reactivity: Human, Mouse

Volumes: 100 µl, 10 µl

Purification: Affinity Purified

Host: Rabbit

Molecular Weight: 120 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. Lys44 is dimethylated by G9a/GLP and is recognized by the chromo-domain containing protein MPP8.

Immunogen: This antibody was raised against a peptide including dimethyl Lys 44 of mouse DNMT3A (DNA methyltransferase 3 alpha)

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

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. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.