

## DNMT3A antibody (pAb)

**Catalog Nos:** 39897, 39898

**RRID:** AB\_2793386

**Isotype:** IgG

**Application(s):** IHC, WB

**Reactivity:** Mouse

**Volumes:** 100  $\mu$ l, 10  $\mu$ l

**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.

**Immunogen:** This DNMT3A antibody was raised against a recombinant protein corresponding to amino acids 1-247 of mouse DNMT3A.

**Buffer:** Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

### Application Notes:

Validated Applications:

WB: 1:500 - 1:1,000 dilution

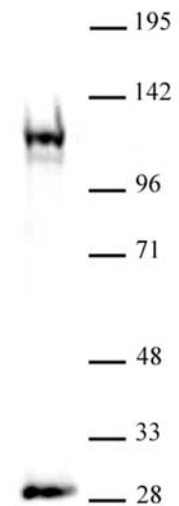
Published Applications:

IHC

WB

See references for more information. Individual optimization may be required.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Upon receipt, unconjugated antibodies may be stored at -20°C for up to 2 years. Fluorophore- & enzyme-conjugated antibodies should be stored at 4°C. Fluorophore-conjugated antibodies should be protected from light. Keep reagents on ice when not in storage; to avoid repeated freeze/thaw cycles, we recommend aliquoting items that will be stored frozen into single-use fractions prior to freezing. This product is guaranteed for 6 months from date of receipt.



### DNMT3A antibody (pAb) tested by Western blot.

Nuclear extract (30  $\mu$ g) of mouse ES cells probed with DNMT3A antibody at a dilution of 1:500.