

## DNMT3B antibody (pAb)

**Catalog Nos:** 39899, 39900**RRID:** AB\_2793387**Isotype:** IgG**Application(s):** WB**Reactivity:** Mouse**Volumes:** 100 µl, 10 µl**Purification:** Affinity Purified**Host:** Rabbit**Molecular Weight:** 110 kDa

**Background:** DNMT3B (DNA (Cytosine-5-)-Methyltransferase 3 Beta) proteins 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. Three families of DNMTs have been identified: DNMT1, DNMT2 and DNMT3.

The DNMT3 family contains two active methyltransferases, DNMT3A & DNMT3B, and one DNMT3-Like protein (DNMT3L). DNMT3B has been shown to be important in the regulation of specific patterns of DNA methylation, specifically *de novo* 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 the control of gene expression. DNA methylation is generally associated with transcriptional repression. Mutations in the DNMT3B gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome.

**Immunogen:** This DNMT3B antibody was raised against a recombinant protein corresponding to amino acids 1-218 of mouse DNMT3B.

**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:**

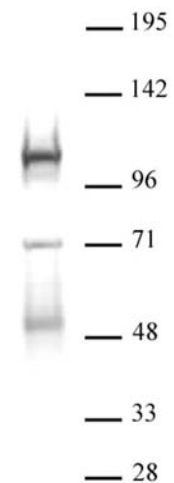
Applications Validated by Active Motif:

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

\*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

**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.

**DNMT3B antibody (pAb) tested by Western blot.**

Nuclear extract (30 µg) of mouse ES cells probed with DNMT3B antibody at a dilution of 1:500.