**BioVision** O9/13 For research use only

## **DNMT3a Antibody**

**ALTERNATE NAMES:** DNA Methyltransferase 3a, DNMT3A

**CATALOG #**: 3227-100

**AMOUNT**: 100 μg

HOST: Rabbit

ISOTYPE: IgG

**IMMUNOGEN:** Synthetic peptide at near N-terminal (BV-M36)

**PURIFICATION:** Affinity purified rabbit IgG

FORM: Liquid

**FORMULATION:** 100  $\mu$ g (0.5 mg/ml) of antibody in PBS, 0.01 % BSA, 0.01 %

thimerosal, and 50 % glycerol, pH 7.2

**SPECIES REACTIVITY:** Human, Mouse and Rat.

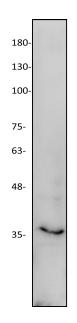
STORAGE CONDITIONS: Store for 1 year at -20°C from date of shipment. Avoid repeated

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.

APPLICATION: Western blot: 1:200

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



Western blot of Jurkat cell lysate with DNMT3a antibody

## **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 3a Monoclonal Antibody (Cat. No. 6113-50)
- DNA Methyltransferase 3b Monoclonal Antibody (Cat. No. 6114-50)
- 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.

