

## **Product datasheet for TA326396**

## **DNMT3L Mouse Monoclonal Antibody [Clone ID: S117-9]**

## **Product data:**

**Product Type:** Primary Antibodies

Clone Name: S117-9
Applications: WB

Recommended Dilution: WB: 1-10ug/ml, IHC: 0.1-1.0ug/ml, IF: 1.0-10ug/ml

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Fusion protein amino acids 1-387 of human DNMT3L

Formulation: PBS pH7.4, 50% glycerol, 0.09% sodium azide

**Concentration:** lot specific

Purification: Protein G Purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: DNA (cytosine-5-)-methyltransferase 3-like

Database Link: NP 037501

Entrez Gene 29947 Human

**Q9UJW3** 



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Background:

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, 3 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 ES cells but their expression is down regulated in differentiating ES cells and is low in adult somatic tissue . Studies show that DNMT3L regulates the activity of DNMT3A and DNMT3B and stimulates their catalytic activities . DNMT3L has specifically been linked to the process of carcinogenesis, thru its role in nuclear programming .

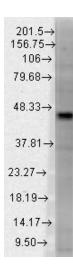
Synonyms: MGC1090

**Note:** Detects ~45kDa. No cross-reactivity against DNMT3a or DNMT3B.

**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Cysteine and methionine metabolism, Metabolic pathways

## **Product images:**



Western blot analysis of DNMT3L in a human tissue mix using a 1:1000 dilution of the antibody