

Anti-DNMT3L Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 12530 (clone S117-9)
Size: 100ug in PBS, pH 7.4; 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

BACKGROUND

Methylation of DNA at cytosine residues is important in regulation of gene expression. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked to development of cancer. Three families of mammalian DNA methyltransferase genes have been identified: DNMT1, DNMT2, and DNMT3. 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. Studies show that DNMT3L regulates the activity of DNMT3a and DNMT3b and stimulates their catalytic activities. DNMT3L has been linked specifically to the process of carcinogenesis through its role in nuclear programming.

SPECIFICATION SUMMARY

Antigen: Fusion protein, aa 1-387 of human DNMT3L (accession no. BAA95556).

Host Species: Mouse

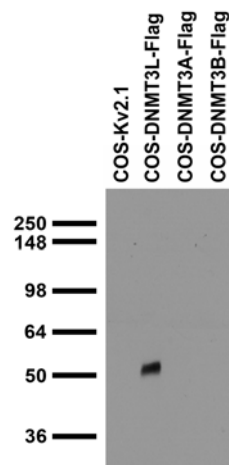
Antibody Class: IgG1

SPECIFICITY

This antibody recognizes human DNMT3L. It does not cross-react with DNMT3a or DNMT3b.

APPLICATIONS

Immunoblotting: use at 1-10ug/ml. A band of ~45kDa is detected.



Immunohistochemistry and

Immunocytochemistry: use at 0.1-1ug/ml

Immunofluorescence: use at 1-10ug/ml

These are recommended concentrations.

User should determine optimal

concentrations for their application.

Positive control: Lysate of COS cells transiently transfected with Flag-tagged DNMT3L.

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freezing and thawing.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.