10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DNMT3B Antibody (aa1-50)
Rabbit Polyclonal Antibody
Catalog # ALS14205

Specification

DNMT3B Antibody (aa1-50) - Product Information

Application	**IF, WB, IHC**
Primary Accession	Q9UBC3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**96kDa KDa**

DNMT3B Antibody (aa1-50) - Additional Information

Gene ID 1789

Other Names
DNA (cytosine-5)-methyltransferase 3B, Dnmt3b, 2.1.1.37, DNA methyltransferase HsaIIIB, DNA MTase HsaIIIB, M.HsaIIIB, DNMT3B

Target/Specificity
DNMT3B Antibody detects endogenous levels of total DNMT3B protein.

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
DNMT3B Antibody (aa1-50) is for research use only and not for use in diagnostic or therapeutic procedures.

DNMT3B Antibody (aa1-50) - Protein Information

Name DNMT3B

Function
Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co-repressor by associating with CBX4 and independently of DNA methylation. Seems to be involved in gene silencing (By similarity). In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Isoforms 4 and 5 are probably not functional due to the deletion of two conserved methyltransferase motifs. Functions as a transcriptional corepressor by associating with ZHX1. Required for DUX4 silencing in somatic cells (PubMed:27153398).

Cellular Location

Nucleus

Tissue Location
Ubiquitous; highly expressed in fetal liver, heart, kidney, placenta, and at lower levels in spleen, colon, brain, liver, small intestine, lung, peripheral blood mononuclear cells, and skeletal muscle. Isoform 1 is expressed in all tissues except brain, skeletal muscle and PBMC, 3 is ubiquitous, 4 is expressed in all tissues except brain, skeletal muscle, lung and prostate and 5 is detectable only in testis and at very low level in brain and prostate

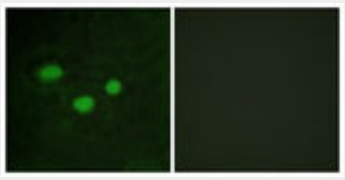
Volume
50 µl

DNMT3B Antibody (aa1-50) - Protocols

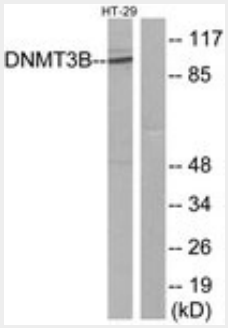
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DNMT3B Antibody (aa1-50) - Images

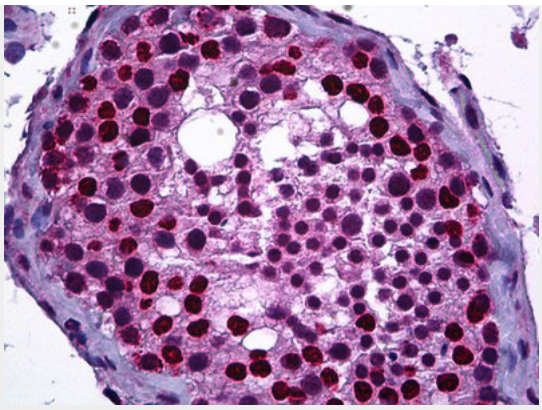


Immunofluorescence of HeLa cells, using DNMT3B Antibody.



Western blot of extracts from HT-29 cells, using DNMT3B Antibody.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-DNMT3B antibody IHC of human testis.

DNMT3B Antibody (aa1-50) - Background

Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. May preferentially methylates nucleosomal DNA within the nucleosome core region. May function as transcriptional co- repressor by associating with CBX4 and independently of DNA methylation. Seems to be involved in gene silencing (By similarity). In association with DNMT1 and via the recruitment of CTCFL/BORIS, involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. Isoforms 4 and 5 are probably not functional due to the deletion of two conserved methyltransferase motifs. Function as transcriptional corepressor by associating with ZHX1.

DNMT3B Antibody (aa1-50) - References

Xie S.,et al.Gene 236:87-95(1999).
Xu G.-L.,et al.Nature 402:187-191(1999).
Ni J.,et al.Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Deloukas P.,et al.Nature 414:865-871(2001).