

Product datasheet for **AP31351PU-N**

DNMT3B (1-50) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	ELISA: 1/20000. Immunofluorescence: 1/100 - 1/500. Immunohistochemistry on Paraffin Sections: 1/100. Western Blot: 1/500 - 1/1000.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide from Human DNMT3B (aa 1-50)
Specificity:	This antibody detects endogenous levels of total DNMT3B protein.
Formulation:	PBS (without Mg ²⁺ , Ca ²⁺), pH 7.4 containing 150 mM Sodium Chloride, 0.02% Sodium Azide and 50% Glycerol. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	95 kDa
Gene Name:	DNA (cytosine-5-)-methyltransferase 3 beta
Database Link:	Entrez Gene 1789 Human Q9UBC3



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Background:

Methylation at the 5'-position of cytosine is the only known naturally occurring covalent modification of the mammalian genome. DNA methylation requires the enzymatic activity of DNA 5-cytosine methyltransferase (Dnmt) proteins, which catalyze the transfer of a methyl group from S-adenosyl methionine to the 5'-position of cytosines residing in the dinucleotide CpG motif, and this methylation results in transcriptional repression of the target gene. The Dnmt enzymes are encoded by independent genes. Dnmt1 is the most abundant, and it preferentially methylates hemimethylated DNA and coordinates gene expression during development. Additional mammalian Dnmt proteins include Dnmt2 and Dnmt3. Dnmt2 lacks the large N-terminal regulator domain of Dnmt1, is expressed at substantially lower levels in adult tissues, and is likely involved in methylating newly integrated retroviral DNA. Dnmt3a and Dnmt3b are encoded by two distinct genes, but both are abundantly expressed in embryonic stem cells, where they also methylate CpG motifs on DNA.

Synonyms:

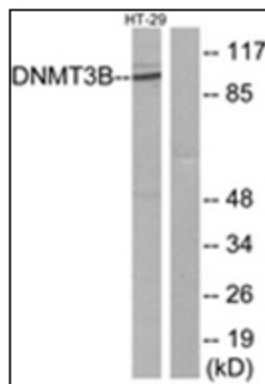
DNA MTase HsallIB, M.HsallIB

Protein Families:

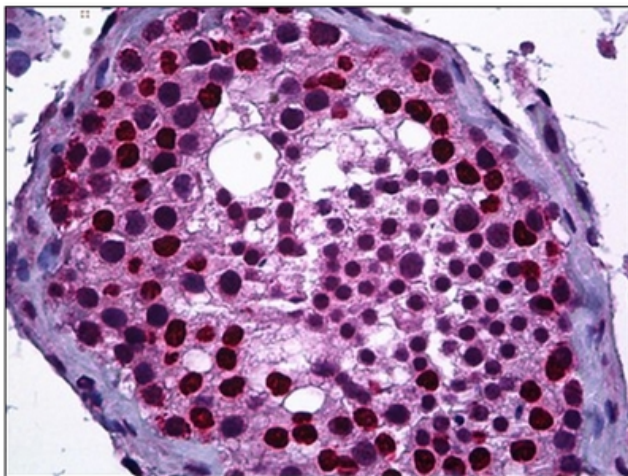
Druggable Genome, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency

Protein Pathways:

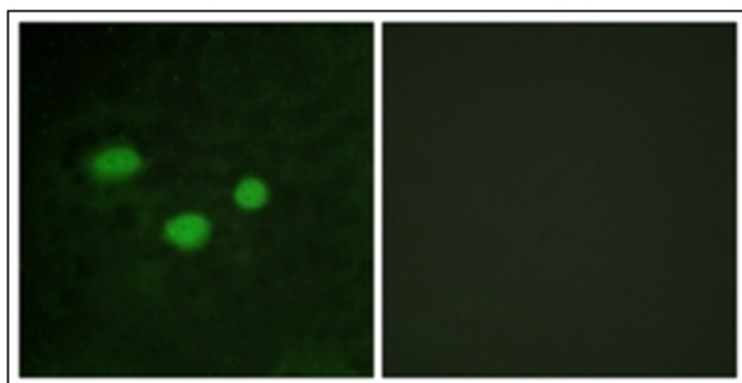
Cysteine and methionine metabolism, Metabolic pathways

Product images:

Western blot analysis of extracts from HT-29 cells, using DNMT3B Antibody. The lane on the right is treated with the synthesized peptide.



Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence analysis of HeLa cells, using DNMT3B Antibody. The picture on the right is treated with the synthesized peptide.