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Product datasheet for TA331002

DNMT3B Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-DNMT3B antibody: synthetic peptide directed towards the middle region of human DNMT3B. Synthetic peptide located within the following region: GTGRLFFEFYHLLNYSRPKEGDDRPFFWMFENVVAMKVGDKRDISRFLEC
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. *Note that this product is shipped as lyophilized powder to China customers.*
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	86 kDa
Gene Name:	DNA (cytosine-5-)-methyltransferase 3 beta
Database Link:	NP_787045 Entrez Gene 13436 MouseEntrez Gene 1789 Human Q9UBC3

View online »

Background: DNMT3B is 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. DNMT3B may preferentially methylate nucleosomal DNA within the nucleosome core region. DNMT3B may function as transcriptional co-repressor by associating with CBX4 and independently of DNA methylation. DNMT3B seems to be involved in gene silencing. In association with DNMT1 and via the recruitment of CTCFL/BORIS, DNMT3B is involved in activation of BAG1 gene expression by modulating dimethylation of promoter histone H3 at H3K4 and H3K9. CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Six alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined.

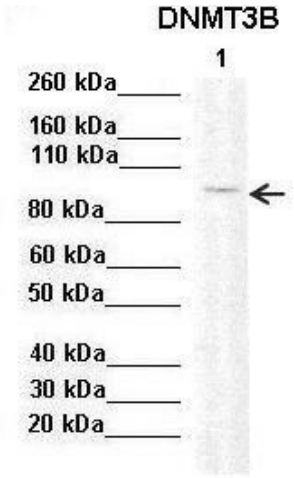
Synonyms: ICF; ICF1; M.HsaIIIB

Note: Dog: 100%; Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Mouse: 100%; Bovine: 100%; Rabbit: 100%; Zebrafish: 100%; Guinea pig: 100%

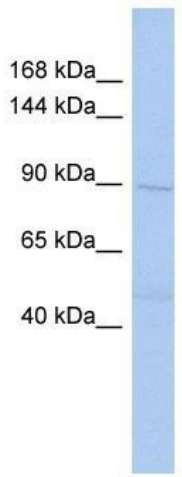
Protein Families: Druggable Genome, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways

Product images:



Sample Type : Lane 1: 20ug mouse mesenchymal stem cell lysate Primary Antibody Dilution : 1:2000 Secondary Antibody: Anti-rabbit-HRP Secondary Antibody Dilution: 1:10,000 Color/Signal Descriptions: DNMT3B Gene Name: Anonymous Submitted by:



WB Suggested Anti-DNMT3B Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:1562500; Positive Control: OVCAR-3 cell lysateDNMT3B is supported by BioGPS gene expression data to be expressed in OVCAR3