

ARG54845
anti-Dnmt3b antibodyPackage: 100 µl
Store at: -20°C**Summary**

Product Description	Rabbit Polyclonal antibody recognizes Dnmt3b
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Dnmt3b
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 389-417 of Human Dnmt3b.
Conjugation	Un-conjugated
Alternate Names	ICF; ICF1; M.HsaIIIB; DNA (cytosine-5)-methyltransferase 3B; Dnmt3b; EC 2.1.1.37; DNA methyltransferase HsaIIIB; DNA MTase HsaIIIB; M.HsaIIIB

Application Instructions

Application table	Application	Dilution
	IHC-P	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

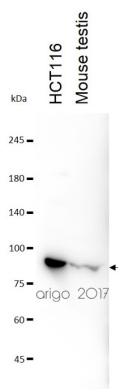
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

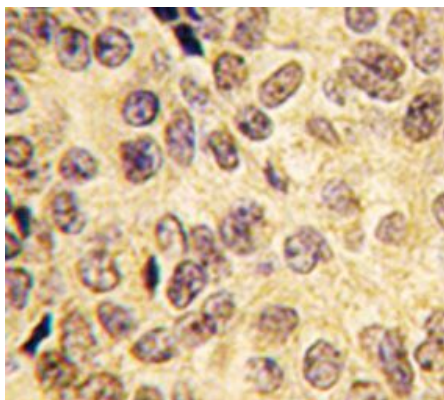
Database links	GeneID: 1789 Human Swiss-port # Q9UBC3 Human
Gene Symbol	DNMT3B
Gene Full Name	DNA (cytosine-5-)-methyltransferase 3 beta
Background	CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have 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. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined. [provided by RefSeq, May 2011]
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. Function as transcriptional corepressor by associating with ZHX1. [UniProt]
Research Area	Gene Regulation antibody
Calculated Mw	96 kDa
PTM	Sumoylated. Citrullinated by PADI4.
Cellular Localization	Nucleus

Images



ARG54845 anti-Dnmt3b antibody WB image

Western blot: 30 µg of HCT116 and Mouse testis lysates stained with ARG54845 anti-Dnmt3b antibody at 1:1000 dilution.



ARG54845 anti-Dnmt3b antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human prostata carcinoma tissue stained with ARG54845 anti-Dnmt3b antibody.