



# Dnmt3b Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01665
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Chicken(testedbyyourcustomer)
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	DNMT3B
<b>Protein Name</b>	DNA (cytosine-5)-methyltransferase 3B
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human DNMT3B. AA range:1-50
<b>Specificity</b>	Dnmt3b Polyclonal Antibody detects endogenous levels of Dnmt3b protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	DNMT3B; DNA (cytosine-5)-methyltransferase 3B; Dnmt3b; DNA methyltransferase HsaIIIB; DNA MTase HsaIIIB; M.HsaIIIB
<b>Observed Band</b>	96kD
<b>Cell Pathway</b>	Nucleus .
<b>Tissue Specificity</b>	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.
<b>Function</b>	catalytic activity:S-adenosyl-L-methionine + DNA = S-adenosyl-L-homocysteine + DNA containing 5-methylcytosine.,disease:Defects in DNMT3B are a cause of immunodeficiency-centromeric instability-facial anomalies syndrome (ICF) [MIM:242860]. ICF is a rare autosomal recessive disorder characterized by a variable immunodeficiency, mild facial anomalies, and centromeric heterochromatin instability involving chromosomes 1, 9, and 16. ICF is biochemically characterized by hypomethylation of CpG sites in some regions of heterochromatin.,function:Required for genome wide de novo methylation and is essential for development. DNA methylation is coordinated with methylation of



histones. Isoforms 4 and 5 are probably not functional due to the deletion of two conserved methyltransferase motifs.,online information:DNMT3B mutation db,PTM:Sumoylated.,similarity:Belongs to the C5-methyltransferase family.

**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],

**matters needing attention**

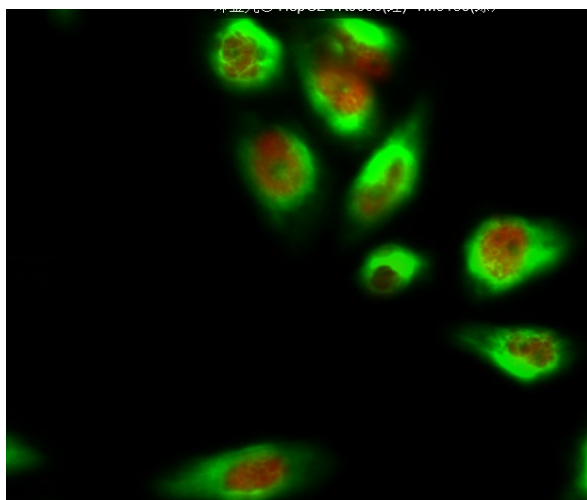
Avoid repeated freezing and thawing!

**Usage suggestions**

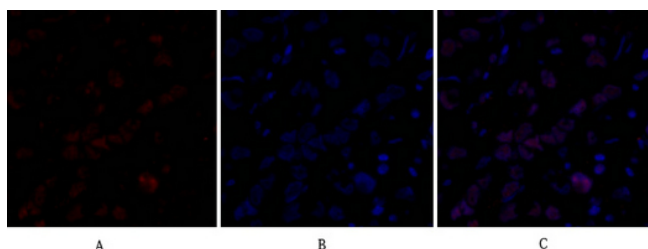
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



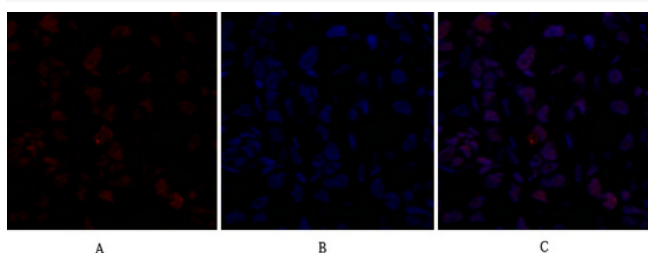
## Products Images



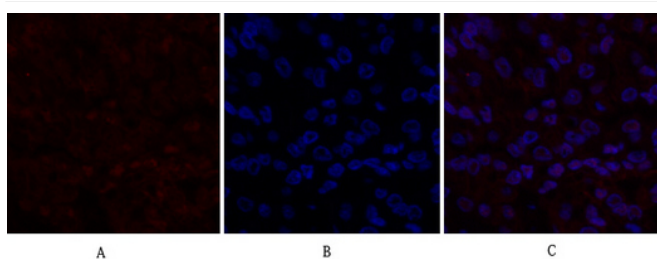
Immunofluorescence analysis of Hela cell. 1, Dnmt3b Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). Bcl-2 Monoclonal Antibody (6B5) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



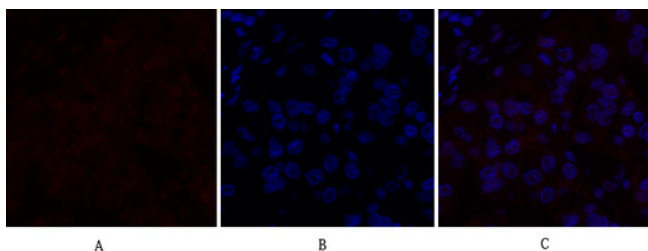
Immunofluorescence analysis of human-breast-cancer tissue. 1, Dnmt3b Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



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Immunofluorescence analysis of human-liver-cancer tissue. 1, Dnmt3b Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of human-liver-cancer tissue. 1, Dnmt3b Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B