Dnmt3b Monoclonal Antibody

Catalog No	YP-mAb-01665
Isotype	IgG
Reactivity	Human;Chicken(testedbyourcustomer）
Applications	WB
Gene Name	DNMT3B
Protein Name	DNA (cytosine-5)-methyltransferase 3B
Immunogen	The antiserum was produced against synthesized peptide derived from human DNMT3B. AA range:1-50
Specificity	Dnmt3b Monoclonal Antibody detects endogenous levels of Dnmt3b protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNMT3B; DNA (cytosine-5)-methyltransferase 3B; Dnmt3b; DNA methyltransferase HsaIIIB; DNA MTase HsaIIIB; M.HsaIIIB
Observed Band	96kD
Cell Pathway	Nucleus .
Tissue Specificity	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.
Function	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.

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