



DNM3A Monoclonal Antibody

Catalog No	YP-mAb-05041
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DNMT3A
Immunogen	Synthesized peptide derived from human protein . at AA range: 10-90
Specificity	DNM3A Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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	M.HsaIIIA;EC:2.1.1.37;EC:2.1.1.-;DNA MTase HsaIIIA;DNA (cytosine-5)-methyltransferase 3A;DNM3A;DNMT3A;DNA (cytosine-5)-methyltransferase 3A (Dnmt3a) (EC 2.1.1.37) (DNA methyltransferase HsaIIIA) (DNA MTase HsaIIIA) (M.HsaIIIA)
Observed Band	100kD
Calculated Molecular Weight	100kD
Cell Pathway	Nucleus . Chromosome . Cytoplasm . Accumulates in the major satellite repeats at pericentric heterochromatin. .
Tissue Specificity	Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung.
Function	catalytic activity:S-adenosyl-L-methionine + DNA = S-adenosyl-L-homocysteine + DNA containing 5-methylcytosine.,caution:It is uncertain whether Met-1 or Met-4 is the initiator.,function:Required for genome wide de novo methylation and is essential for development. DNA methylation is coordinated with methylation of histones.,similarity:Belongs to the C5-methyltransferase family.,similarity:Contains 1 ADD-type zinc finger.,similarity:Contains 1 PWWP domain.,subunit:Binds the ZNF238 transcriptional repressor. Interacts with SETDB1.



Associates with HDAC1 through its ADD-type zinc-finger (By similarity). Interacts with DNMT1 and DNMT3B. Interacts with the PRC2/EED-EZH2 complex.,tissue specificity:Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung.,

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 that is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes to the cytoplasm and nucleus and its expression is developmentally regulated. [provided by RefSeq, Mar 2016],

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