

Anti-DNM3A antibody



Description	Unconjugated Rabbit polyclonal to DNMT3A
Model	STJ190270
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human DNMT3A protein.
Immunogen Region	10-90aa
Gene ID	1788
Gene Symbol	DNMT3A
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	DNMT3A Polyclonal Antibody detects endogenous levels of protein.
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.
Purification	DNMT3A antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	DNA cytosine-5-methyltransferase 3A Dnmt3a DNA methyltransferase HsaIIIA DNA MTase HsaIIIA M.HsaIIIA
Molecular Weight	100 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:29780MIM:602769
Alternative Names	DNA cytosine-5-methyltransferase 3A Dnmt3a DNA methyltransferase HsaIIIA DNA MTase HsaIIIA M.HsaIIIA
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. It modifies DNA in a non-processive manner and also methylates non-CpG sites. May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1. Plays a role in paternal and maternal imprinting. Required for methylation of most imprinted loci in germ cells. Acts as a transcriptional corepressor for ZBTB18. Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites. Can actively repress transcription through the recruitment of HDAC activity.
Sequence and Domain Family	The PWWP domain is essential for targeting to pericentric heterochromatin. It specifically recognizes and binds trimethylated 'Lys-36' of histone H3 (H3K36me3) .
Cellular Localization	Nucleus Cytoplasm. Accumulates in the major satellite repeats at pericentric heterochromatin.
Post-translational Modifications	Sumoylated; sumoylation disrupts the ability to interact with histone deacetylases (HDAC1 and HDAC2) and repress transcription.