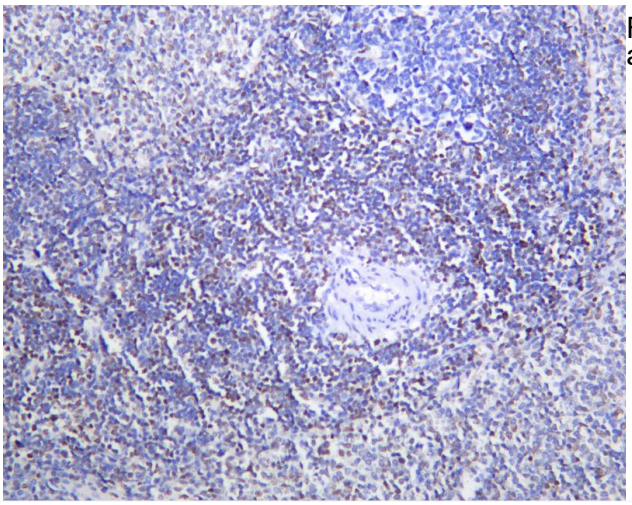
Dnmt3a Rabbit mAb

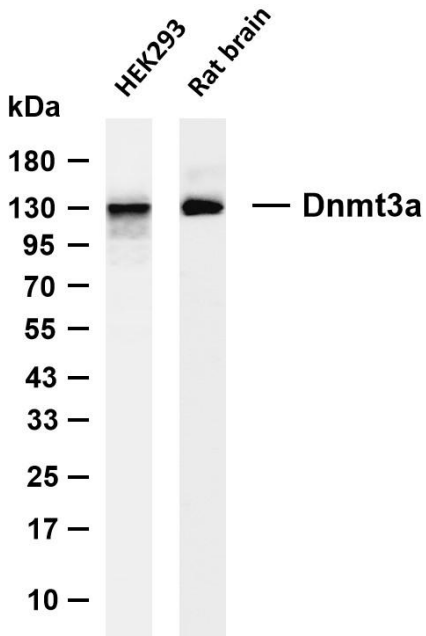
Catalog No	YP-rAb-17389
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	DNMT3A
Protein Name	DNA (cytosine-5)-methyltransferase 3A (Dnmt3a) (DNA methyltransferase HsaIIIA) (DNA MTase HsaIIIA) (M.HsaIIIA)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:100-1:500; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	
Observed Band	130kD
Calculated Molecular Weight	102kD
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.



Rat spleen was stained with anti-Dnmt3a Rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Dnmt3a antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: Rat brain Predicted band size: 102kDa Observed band size: 130kDa