



## Rabbit Anti-Dnmt3a antibody

SL0497R

<b>Product Name:</b>	Dnmt3a
<b>Chinese Name:</b>	DNA 甲基转移酶-3α抗体
<b>Alias:</b>	DNA (cytosine 5 ) methyltransferase 3 alpha; DNA (cytosine 5) methyltransferase 3A; DNA cytosine methyltransferase 3A2; DNA methyltransferase 3a; DNA methyltransferase HsaIIIA; DNA MTase HsaI; DNA MTase HsaIIIA; DNMT 3a; DNMT; Dnmt3a; DNMT3A2; M HsaIIIA; M.HsaIIIA; MCMT; Methyl CpG binding domain protein 3a.
<b>文献引用</b> PubMed	<p><b>Specific References(3)</b> SL0497R has been referenced in 3 publications.</p> <p><b>[IF=5.20]</b>Zhao, Qian, et al. "Prenatal Cocaine Exposure Impairs Cognitive Function of Progeny Via Insulin Growth Factor II Epigenetic Regulation." <i>Neurobiology of Disease</i> (2015).<b>WB;Mouse</b>.  <a href="#">PubMed:26054440</a></p> <p><b>[IF=0.00]</b>G?kmen, Esra, and Kemal Ergin. "DNA Methyltransferase Expression and Proliferation Status of Metastatic Breast Cancer Cell Line After Prolonged and Repeated Rapamycin and Melatonin Application." <i>Meandros Medical Journal</i>.<b>Human</b>.  <a href="#">PubMed:not posted yet</a></p> <p><b>[IF=3.85]</b>Wu, Yuting, et al. "Methylation of Septin9 mediated by DNMT3a enhances hepatic stellate cells activation and liver fibrogenesis." <i>Toxicology and Applied Pharmacology</i> 315 (2017): 35-49.<b>WB;Mouse</b>.  <a href="#">PubMed:27939986</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Cow,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=1:100-

	500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	100kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Dnmt3a:26-100/912
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>The tumor organization has the DNA methylation disorder, including and damps cancer gene high methylation DNA with the cell multiplication cycle close related cancer gene low methylation the methyl transferase (Dnmt) participation methylation the formation (is mainly Dnmt3a and Dnmt3b) and the maintenance (is mainly Dnmt1) (isoform CRA_b) (DNA methyltransferase MmuIIIA) (DNA MTase MmuIIIA)</p> <p><b>Function:</b> 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 ZNF238. Can actively repress transcription through the recruitment of HDAC activity.</p> <p><b>Subunit:</b> Heterotetramer composed of 1 DNMT3A homodimer and 2 DNMT3L subunits (DNMT3L-DNMT3A-DNMT3A-DNMT3L). Interacts with UBC9, PIAS1 and PIAS2. Binds the ZNF238 transcriptional repressor. Interacts with SETDB1. Associates with HDAC1 through its ADD domain. Interacts with DNMT1 and DNMT3B. Interacts with the PRC2/EED-EZH2 complex. Interacts with MPHOSPH8. Interacts with histone H3 that is not methylated at 'Lys-4' (H3K4).</p> <p><b>Subcellular Location:</b> Nucleus. Cytoplasm. Note=Accumulates in the major satellite repeats at pericentric heterochromatin.</p> <p><b>Tissue Specificity:</b> Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear</p>

cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung.

**Post-translational modifications:**

Sumoylated; sumoylation disrupts the ability to interact with histone deacetylases (HDAC1 and HDAC2) and repress transcription.

**Similarity:**

Belongs to the C5-methyltransferase family.

Contains 1 ADD domain.

Contains 1 GATA-type zinc finger.

Contains 1 PHD-type zinc finger.

Contains 1 PWWP domain.

**SWISS:**

Q9Y6K1

**Gene ID:**

1788

**Database links:**

[Entrez Gene: 1788](#)Human

[Entrez Gene: 13435](#)Mouse

[Oimim: 602769](#)Human

[SwissProt: Q9Y6K1](#)Human

[SwissProt: O88508](#)Mouse

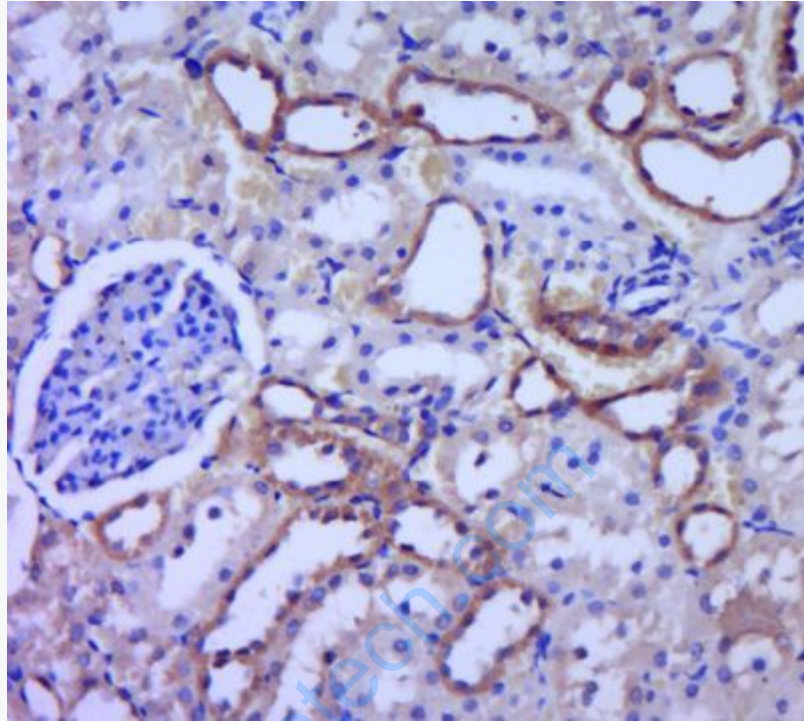
[Unigene: 515840](#)Human

[Unigene: 5001](#)Mouse

**Important Note:**

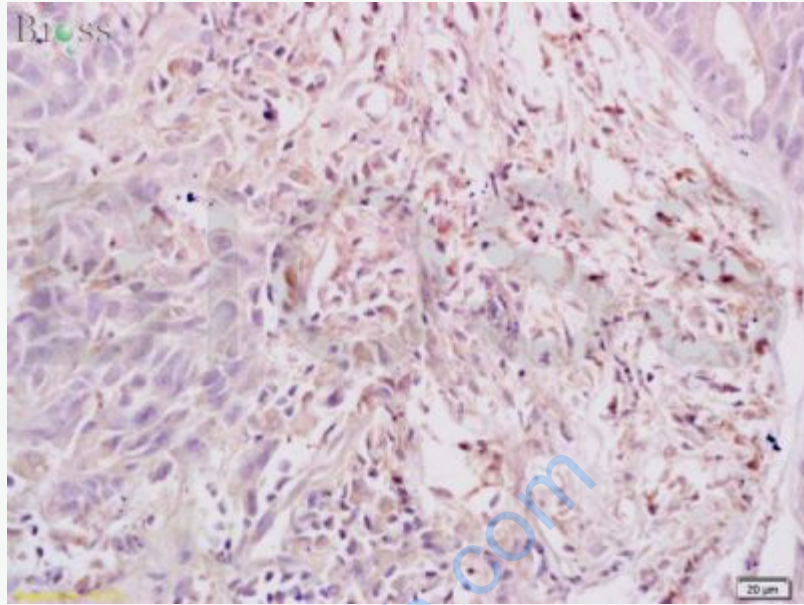
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Tumour组织存在DNA甲基化紊乱, 包括与细胞增殖周期密切相关的癌基因低甲基化和抑癌基因高甲基化DNA甲基转移酶(Dnmt)参与甲基化的形成(主要是Dnmt3a和Dnmt3b)和维持(主要是Dnmt1)



**Picture:**

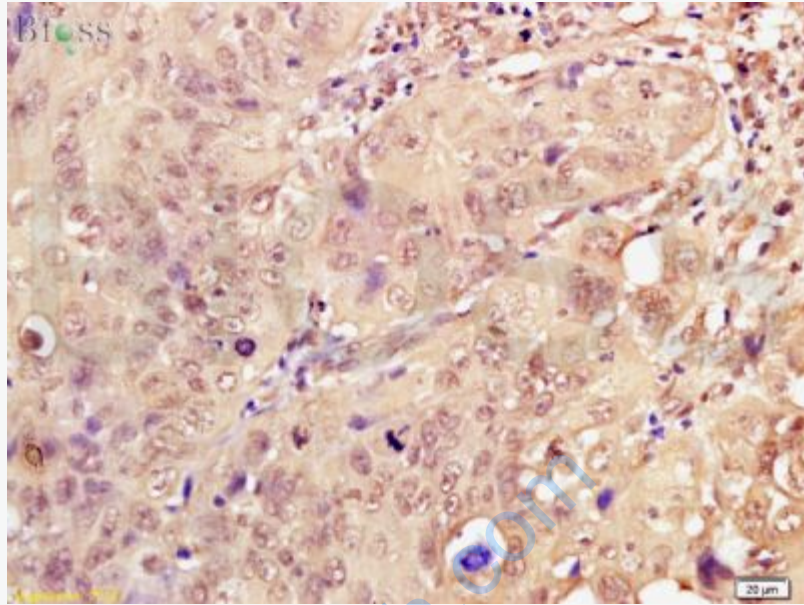
Paraformaldehyde-fixed, paraffin embedded (rat kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Dnmt3a) Polyclonal Antibody, Unconjugated (SL0497R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

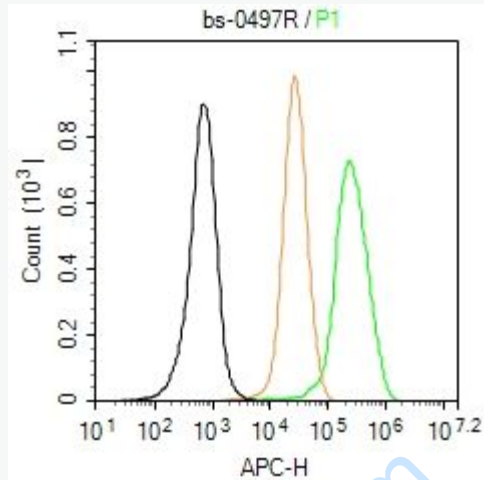
Incubation: Anti-Dnmt3a Polyclonal Antibody, Unconjugated(SL0497R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human breast carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Dnmt3a Polyclonal Antibody, Unconjugated(SL0497R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (Black line): U87MG (Black).

Primary Antibody (green line): Rabbit Anti-Dnmt3a antibody (SL0497R)

Dilution: 1 $\mu$ g /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1 $\mu$ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.