



## Rabbit Anti-DNMT-3 alpha antibody

SL23029R

<b>Product Name:</b>	DNMT-3 alpha
<b>Chinese Name:</b>	DNA 甲基转移酶-3 $\alpha$ 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 HsaIII A; DNA MTase HsaI; DNA MTase HsaIII A; DNMT 3a; DNMT; Dnmt3a; DNMT3A2; M HsaIII A; M.HsaIII A; MCMT; Methyl CpG binding domain protein 3a.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Cow,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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 DNMT-3 alpha:51-150/912
<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>	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)

**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 ZNF238. Can actively repress transcription through the recruitment of HDAC activity.

**Subunit:**

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).

**Subcellular Location:**

Nucleus. Cytoplasm. Note=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.

**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

[Omim: 602769](#)Human

[SwissProt: Q9Y6K1](#)Human

[SwissProt: O88508](#)Mouse

[Unigene: 515840](#)Human

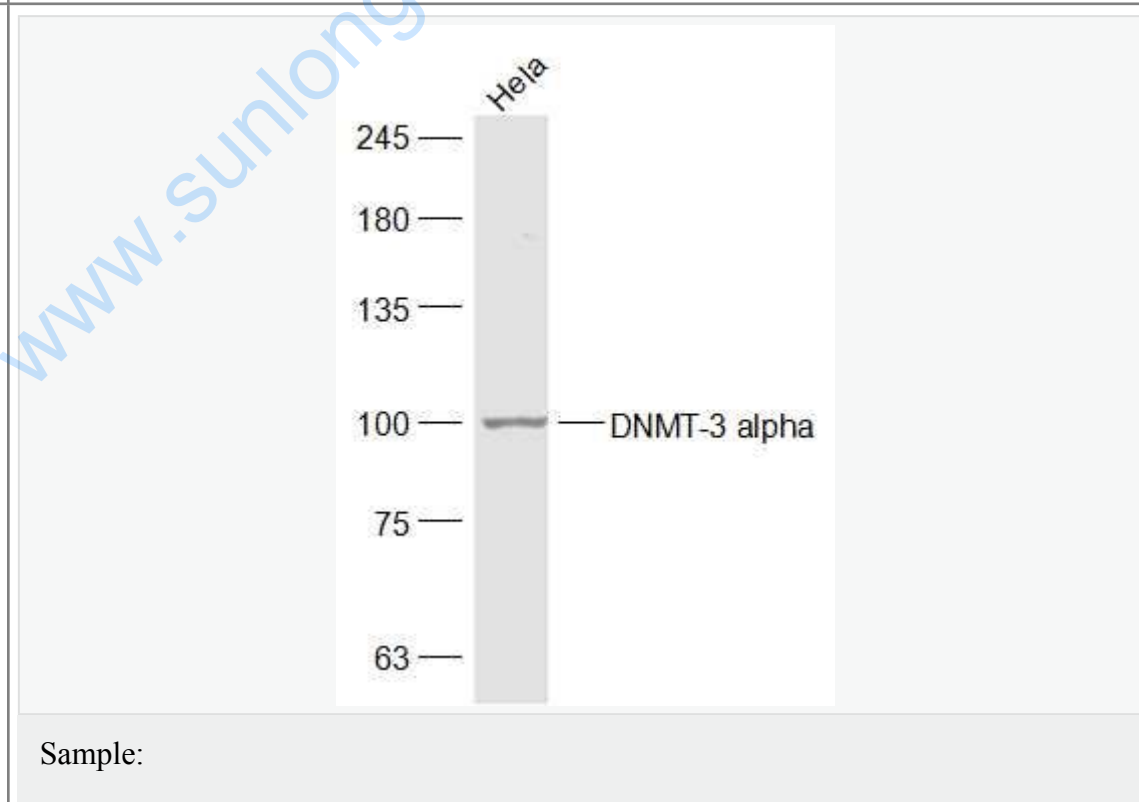
[Unigene: 5001](#)Mouse

**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:**



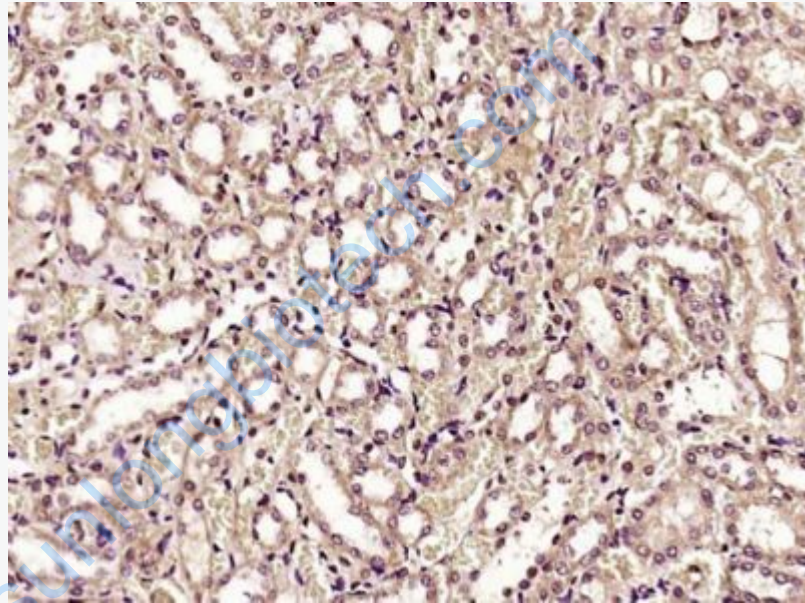
Hela(Human) Cell Lysate at 30 ug

Primary: Anti-DNMT-3 alpha (SL23029R) at 1/1000 dilution

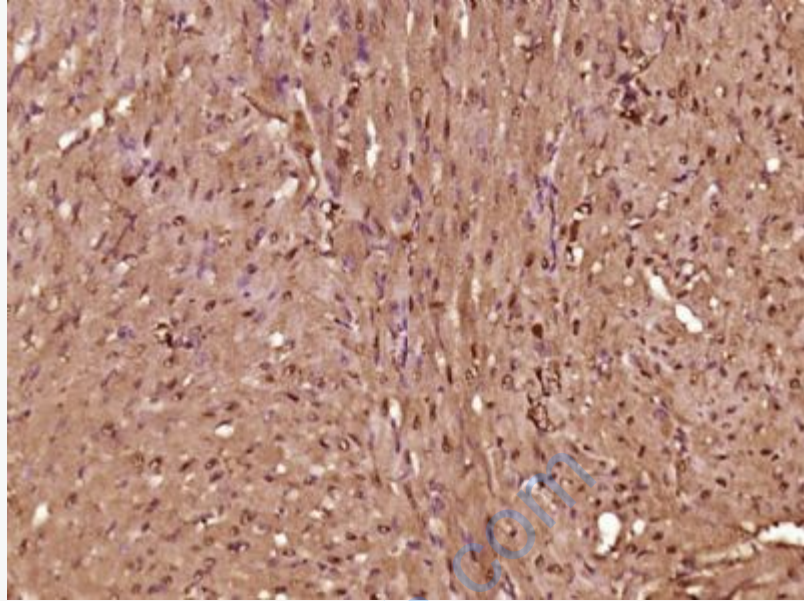
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 100 kD

Observed band size: 100 kD



Paraformaldehyde-fixed, paraffin embedded (Rat kidney); 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 (DNMT-3 alpha) Polyclonal Antibody, Unconjugated (SL23029R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat heart); 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 (DNMT-3 alpha) Polyclonal Antibody, Unconjugated (SL23029R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.