

## Rabbit Anti-PRMT6 antibody

SL6063R

**Product Name** PRMT6

**Chinese Name** 组蛋白精氨酸甲基转移酶 6 抗体

**Alias** PRMT 6; PRMT6; ANM6\_HUMAN; Heterogeneous nuclear ribonucleoprotein methyltransferase like protein 6; Heterogeneous nuclear ribonucleoprotein methyltransferase-like protein 6; Histone-arginine N-methyltransferase PRMT6; HMT1 hnRNP methyltransferase like 6; HRMT1L6; prmt6; Protein arginine methyltransferase 6; Protein arginine N methyltransferase 6; Protein arginine N-methyltransferase 6.

**Research Area** Chromatin and nuclear signals Epigenetics

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human,Mouse,Rat(predicted:Dog,Pig,Cow,Horse)  
IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)

**Applications** not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 42kDa

**Cellular localization** The nucleus

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human PRMT6: 301-375/375

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

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

**PubMed**

[PubMed](#)

Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA. Preferentially methylates arginyl residues present in a glycine and arginine-rich domain and displays preference for monomethylated substrates. Specifically mediates the asymmetric dimethylation of histone H3 'Arg-2' to form H3R2me2a. H3R2me2a represents a specific tag for epigenetic transcriptional repression and is mutually exclusive with methylation on histone H3 'Lys-4' (H3K4me2 and H3K4me3). It thereby acts as a transcription corepressor of various genes such as HOXA2. Also methylates histone H2A and H4 'Arg-3' (H2AR3me and H4R3me, respectively). Acts as a regulator of DNA base excision during DNA repair by mediating the methylation of DNA polymerase beta (POLB), leading to stimulate the polymerase activity by enhancing DNA binding and processivity. Methylates HMGA1. May play a role in innate immunity against HIV-1 in case of infection by methylating and impairing the function of various HIV-1 proteins such as Tat, Rev and Nucleocapsid protein p7 (NC).

**Product Detail**

**Function:**

Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA. Preferentially methylates arginyl residues present in a glycine and arginine-rich domain and displays preference for monomethylated substrates. Specifically mediates the asymmetric dimethylation of histone H3 'Arg-2' to form H3R2me2a. H3R2me2a represents a specific tag for epigenetic transcriptional repression and is mutually exclusive with methylation on histone H3 'Lys-4' (H3K4me2 and H3K4me3). It thereby acts as a transcription corepressor of various genes such as HOXA2. Also methylates histone H2A and H4 'Arg-3' (H2AR3me and H4R3me, respectively). Acts as a regulator of DNA base excision during DNA repair by mediating the methylation of DNA polymerase beta (POLB), leading to stimulate the polymerase activity by enhancing DNA binding and processivity. Methylates HMGA1. May play a role in innate immunity against HIV-1 in case of infection by methylating and impairing the function of various HIV-1 proteins such as Tat, Rev and Nucleocapsid protein p7 (NC).

**Subunit:**

Interacts with (and methylates) HIV-1 Tat, Rev and Nucleocapsid protein p7 (NC).

**Subcellular Location:**

Nucleus.

**Tissue Specificity:**

Highly expressed in kidney and testes.

**Post-translational modifications:**

Automethylated.

**Similarity:**

Belongs to the protein arginine N-methyltransferase family. PRMT6 subfamily.

**SWISS:**

Q96LA8

**Gene ID:**

55170

**Database links:**

[Entrez Gene: 55170](#) Human

[Entrez Gene: 99890](#) Mouse

[Entrez Gene: 295384](#) Rat

[Omid: 608274](#) Human

[SwissProt: Q96LA8](#) Human

[SwissProt: Q6NZB1](#) Mouse

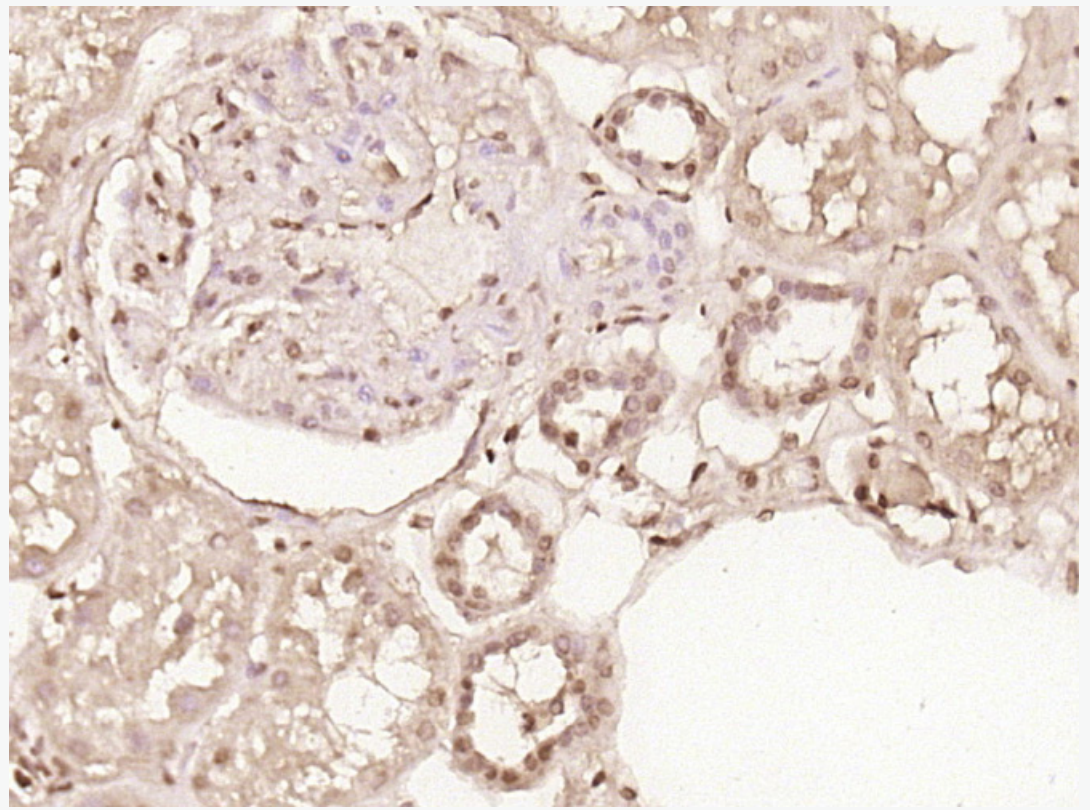
[Unigene: 26006](#) Human

[Unigene: 36115](#) Mouse

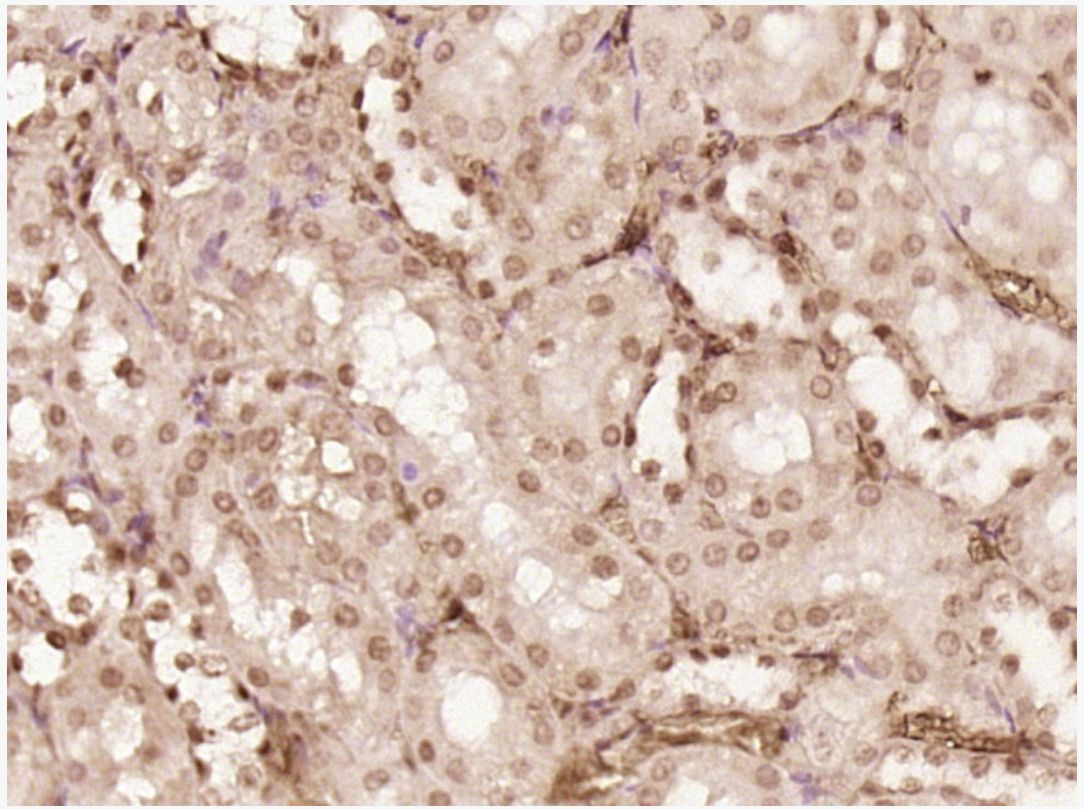
[Unigene: 393526](#) Mouse

[Unigene: 18530](#) Ra

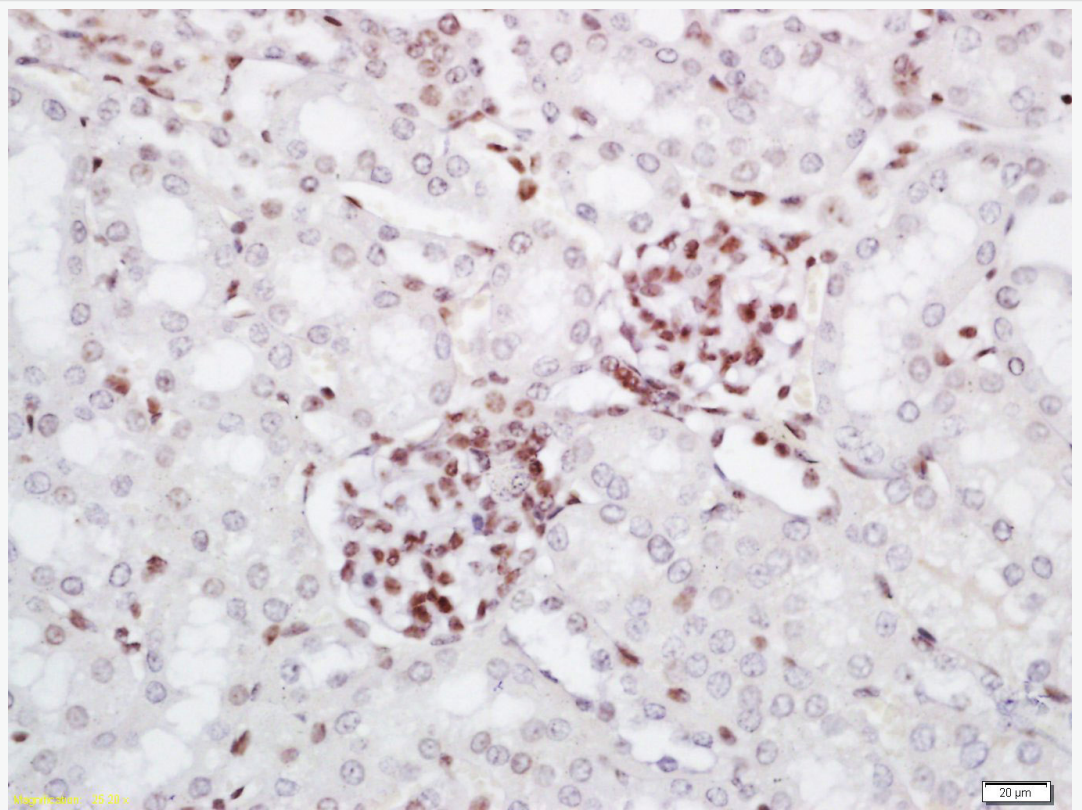
**Product  
Picture**



Paraformaldehyde-fixed, paraffin embedded (Human 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 (PRMT6) Polyclonal Antibody, Unconjugated (SL6063R) 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 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 (PRMT6) Polyclonal Antibody, Unconjugated (SL6063R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: mouse kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 1M, 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-PRMT6 Polyclonal Antibody, Unconjugated(SL6063R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining