

**PRMT6 antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10063****Specification**

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**PRMT6 antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O96LA8</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41938

**PRMT6 antibody - Additional Information****Gene ID** 55170

Positive Control	Jurkat cell lysate
Application & Usage	Western Blot analysis (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. Blocking peptide is available separately.

**Other Names**

Protein arginine N-methyltransferase 6, Heterogeneous nuclear ribonucleoprotein methyltransferase-like protein 6, Histone-arginine N-methyltransferase, PRMT6, PRMT6, HRMT1L6

**Target/Specificity**

PRMT6

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) affinity purified rabbit anti-PRMT6 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

PRMT6 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## PRMT6 antibody - Protein Information

**Name** PRMT6

**Synonyms** HRMT1L6

### Function

Arginine methyltransferase that can catalyze the formation of both omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA (PubMed: <a href="http://www.uniprot.org/citations/17898714" target="\_blank">17898714</a>, PubMed: <a href="http://www.uniprot.org/citations/18077460" target="\_blank">18077460</a>, PubMed: <a href="http://www.uniprot.org/citations/18079182" target="\_blank">18079182</a>, PubMed: <a href="http://www.uniprot.org/citations/19405910" target="\_blank">19405910</a>, PubMed: <a href="http://www.uniprot.org/citations/30420520" target="\_blank">30420520</a>). Preferentially methylates arginyl residues present in a glycine and arginine-rich domain and displays preference for monomethylated substrates (PubMed: <a href="http://www.uniprot.org/citations/17898714" target="\_blank">17898714</a>, PubMed: <a href="http://www.uniprot.org/citations/18077460" target="\_blank">18077460</a>, PubMed: <a href="http://www.uniprot.org/citations/18079182" target="\_blank">18079182</a>, PubMed: <a href="http://www.uniprot.org/citations/19405910" target="\_blank">19405910</a>). Specifically mediates the asymmetric dimethylation of histone H3 'Arg-2' to form H3R2me2a (PubMed: <a href="http://www.uniprot.org/citations/17898714" target="\_blank">17898714</a>, PubMed: <a href="http://www.uniprot.org/citations/18079182" target="\_blank">18079182</a>, PubMed: <a href="http://www.uniprot.org/citations/18077460" target="\_blank">18077460</a>). H3R2me2a represents a specific tag for epigenetic transcriptional repression and is mutually exclusive with methylation on histone H3 'Lys-4' (H3K4me2 and H3K4me3) (PubMed: <a href="http://www.uniprot.org/citations/17898714" target="\_blank">17898714</a>, PubMed: <a href="http://www.uniprot.org/citations/18077460" target="\_blank">18077460</a>). Acts as a transcriptional repressor of various genes such as HOXA2, THBS1 and TP53 (PubMed: <a href="http://www.uniprot.org/citations/19509293" target="\_blank">19509293</a>). Repression of TP53 blocks cellular senescence (By similarity). 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 the stimulation of its polymerase activity by enhancing DNA binding and processivity (PubMed: <a href="http://www.uniprot.org/citations/16600869" target="\_blank">16600869</a>). Methylates HMGA1 (PubMed: <a href="http://www.uniprot.org/citations/16157300" target="\_blank">16157300</a>, PubMed: <a href="http://www.uniprot.org/citations/16159886" target="\_blank">16159886</a>). Regulates alternative splicing events. Acts as a transcriptional coactivator of a number of steroid hormone receptors including ESR1, ESR2, PGR and NR3C1. Promotes fasting-induced transcriptional activation of the gluconeogenic program through methylation of the CRTC2 transcription coactivator (By similarity). 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) (PubMed: <a href="http://www.uniprot.org/citations/17267505" target="\_blank">17267505</a>). Methylates GPS2, protecting GPS2 from ubiquitination and degradation (By similarity). Methylates SIRT7, inhibiting SIRT7 histone deacetylase activity and promoting mitochondria biogenesis (PubMed: <a href="http://www.uniprot.org/citations/30420520" target="\_blank">30420520</a>).

### Cellular Location

Nucleus.

### Tissue Location

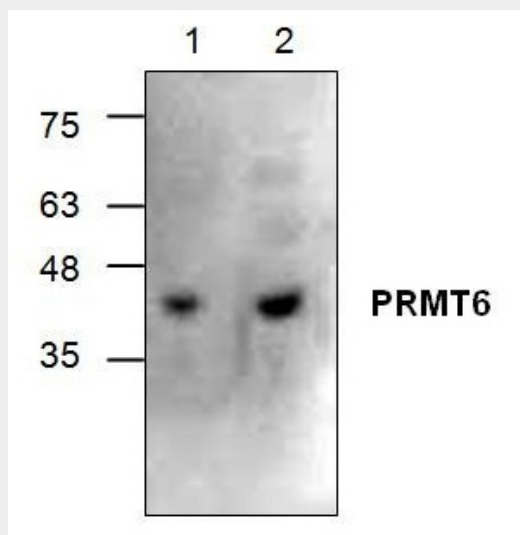
Highly expressed in kidney and testis.

## PRMT6 antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## PRMT6 antibody - Images



Western blot analysis of PRMT6 using Jurkat cell lysate (Lane 1 & 2).

## PRMT6 antibody - Background

Protein arginine methylation is a form of post-translational modification that is catalyzed by protein arginine methyltransferases (PRMTs). PRMT6 catalyzes the sequential transfer of a methyl group from S-adenosyl-L-methionine to the side chain nitrogens of arginine residues within proteins to form methylated arginine derivatives and S-adenosyl-L-homocysteine. PRMT6 has been shown to act as a restriction factor for HIV replication.