

PRMT6 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52660-100 □

Specification

PRMT6 Antibody - Product Information

Application	WB, ICC, IHC
Primary Accession	Q96LA8
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	42 KDa

PRMT6 Antibody - Additional Information

Gene ID 55170

Other Names

ANM6_HUMAN;Chromobox protein homolog 7;FLJ10559;FLJ51477;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;OTTHUMP00000012633;PRMT 6;prmt6; Protein arginine methyltransferase 6;Protein arginine N-methyltransferase 6;Protein arginine N-methyltransferase 6.

Dilution

WB~~1:1000
ICC~~1:300
IHC~~1:100

Format

Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.02% sodium azide, 50% glycerol

Storage

Store at -20 °C.Stable for 12 months from date of receipt

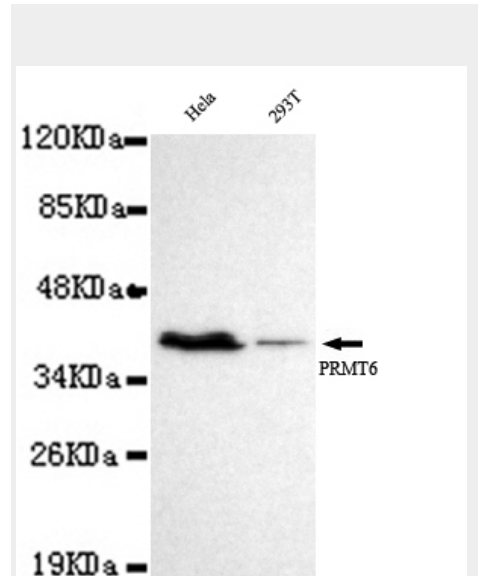
PRMT6 Antibody - Protein Information

Name PRMT6

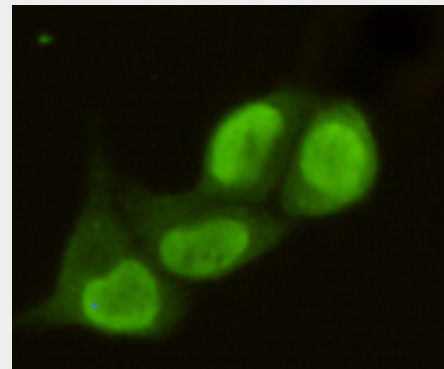
Synonyms HRMT1L6

Function

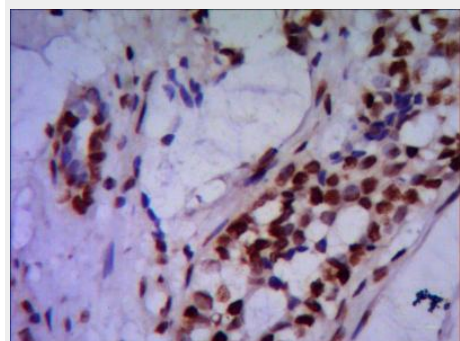
Arginine methyltransferase that can catalyze the formation of both omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA (PubMed:17898714, PubMed:18077460, PubMed:18077460, PubMed:18077460)



Western blot detection of PRMT6 in HeLa and 293T cell lysates using PRMT6 mouse mAb (1:1000 diluted). Predicted band size: 42KDa. Observed band size: 42KDa.



Immunocytochemistry stain of HeLa using PRMT6 mouse mAb (1:300).



Immunohistochemistry stain of paraffin-embedded human breast cancer using PRMT6 mouse mAb (1:300).

<http://www.uniprot.org/citations/18079182>
 target="_blank">18079182, PubMed:<a
<http://www.uniprot.org/citations/19405910>
 target="_blank">19405910). 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, PubMed:<a
<http://www.uniprot.org/citations/18077460>
 target="_blank">18077460, PubMed:<a
<http://www.uniprot.org/citations/18079182>
 target="_blank">18079182, PubMed:<a
<http://www.uniprot.org/citations/19405910>
 target="_blank">19405910). Specifically mediates the
 asymmetric dimethylation of histone H3 'Arg-2' to form
 H3R2me2a (PubMed:<a
<http://www.uniprot.org/citations/17898714>
 target="_blank">17898714, PubMed:<a
<http://www.uniprot.org/citations/18079182>
 target="_blank">18079182, PubMed:<a
<http://www.uniprot.org/citations/18077460>
 target="_blank">18077460). 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
<http://www.uniprot.org/citations/17898714>
 target="_blank">17898714, PubMed:<a
<http://www.uniprot.org/citations/18077460>
 target="_blank">18077460). 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). 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
<http://www.uniprot.org/citations/16600869>
 target="_blank">16600869). Methylates HMGA1
 (PubMed:<a href="http://www.uniprot.org/citations/16157300"
 target="_blank">16157300, PubMed:<a
<http://www.uniprot.org/citations/16159886>
 target="_blank">16159886). 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. 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
<http://www.uniprot.org/citations/17267505>
 target="_blank">17267505). Methylates GPS2, protecting
 GPS2 from ubiquitination and degradation (By similarity).

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 - Background

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. 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). Acts as a transcriptional repressor of various genes such as HOXA2, THBS1 and TP53. 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. Methylates HMGA1. 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. 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).

PRMT6 Antibody - References

Frankel A., et al. *J. Biol. Chem.* 277:3537-3543(2002). Ota T., et al. *Nat. Genet.* 36:40-45(2004). Gregory S.G., et al. *Nature* 441:315-321(2006). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases. Bechtel S., et al. *BMC Genomics* 8:399-399(2007).