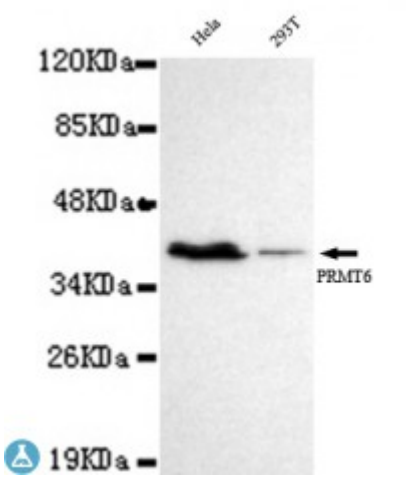
Anti-PRMT6 antibody



Description	Mouse monoclonal to PRMT6.

Model	STJ99045
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant human PRMT6 protein fragments expressed in E.coli.
Gene ID	55170
Gene Symbol	PRMT6
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of PRMT6 and does not cross-react with related proteins.
Tissue Specificity	Highly expressed in kidney and testis.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	2C3-F1-G1
Note	For Research Use Only (RUO).
Protein Name	Protein arginine N-methyltransferase 6 Heterogeneous nuclear ribonucleoprotein methyltransferase-like protein 6 Histone-arginine N-methyltransferase PRMT6
Molecular Weight	42kDa

Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:18241OMIM:608274
Alternative Names	Protein arginine N-methyltransferase 6 Heterogeneous nuclear ribonucleoprotein methyltransferase-like protein 6 Histone-arginine N-methyltransferase PRMT6
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. 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 . 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).
Cellular Localization	Nucleus
Post-translational Modifications	Automethylation enhances its stability and antiretroviral activity.