



## Rabbit Anti-PRMT1 antibody

SL20041R

<b>Product Name:</b>	PRMT1
<b>Chinese Name:</b>	蛋白质精氨酸甲基转移酶1抗体
<b>Alias:</b>	protein arginine methyltransferase 1; ANM 1; ANM1; complete cds; HCP 1; HCP1; Heterogeneous nuclear ribonucleoproteins methyltransferase like 2; Heterogeneous nuclear ribonucleoproteins methyltransferase like2; HMT 2; HMT1 (hnRNP methyltransferase; HMT1 (hnRNP methyltransferase S. cerevisiae) like 2; HMT1 (hnRNP methyltransferase S. cerevisiae)-like 2; HMT1 hnRNP methyltransferase like 2; HMT1 hnRNP methyltransferase-like 2 (S. cerevisiae); HMT2; HRMT1 L2; HRMT1L 2; HRMT1L2; Human mRNA for suppressor for yeast mutant; Human mRNA for suppressor for yeast mutant complete cds; Interferon receptor 1 bound protein 4; Interferon receptor 1 bound protein4; Interferon receptor 1bound protein 4; IR1 B4; IR1B 4; IR1B4; Mrmt 1; Mrmt1; PRMT 1; PRMT1; Protein arginine methyltransferase 1; Protein arginine N methyltransferase 1; Protein arginine N methyltransferase1; Protein arginine N-methyltransferase 1 (EC 2.1.1.-) (Interferon receptor 1-bound protein 4); R1B4; S. cerevisiae like 2; S. cerevisiae)-like 2; ANM1 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Pig,Cow,
<b>Applications:</b>	ELISA=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>	41kDa
<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 PRMT1:281-361/361
<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>	<p>PRMTs are a family of proteins that either monomethylate or dimethylate the guanidino nitrogen atoms of arginine side chains. PRMT1 methylates Histone H4 on R3 and acts synergistically with p300/CBP to enhance transcriptional activation by nuclear receptors. PRMT1 also methylates a number of non-histone proteins such as the orphan nuclear receptor HNF4, components of the heterogeneous nuclear ribonucleoprotein (hnRNP) particle, interleukin enhancer-binding factor 3 (ILF3), and interferon alpha and beta receptors. This suggests roles for PRMT1 in transcriptional regulation, mRNA processing and signal transduction. PRMT1 is also a coactivator for p53, methylating histone H4 to facilitate p53-mediated transcription.</p> <p><b>Function:</b>  Arginine methyltransferase that methylates (mono and asymmetric dimethylation) the guanidino nitrogens of arginyl residues present in proteins such as ESR1, histone H2, H3 and H4, PIAS1, HNRNPA1, HNRNPD, NFATC2IP, SUPT5H, TAF15 and EWS. Constitutes the main enzyme that mediates monomethylation and asymmetric dimethylation of histone H4 'Arg-4' (H4R3me1 and H4R3me2a, respectively), a specific tag for epigenetic transcriptional activation. Together with dimethylated PIAS1, represses STAT1 transcriptional activity, in the late phase of interferon gamma (IFN-gamma) signaling. May be involved in the regulation of TAF15 transcriptional activity, act as an activator of estrogen receptor (ER)-mediated transactivation, play a key role in neurite outgrowth and act as a negative regulator of megakaryocytic differentiation, by modulating p38 MAPK pathway. Methylates FOXO1 and retains it in the nucleus increasing its transcriptional activity.</p> <p><b>Subunit:</b>  Homodimer and heterodimer with PRMT8. Individual homodimers can associate to form a homo-hexamer. Interacts with BTG1, BTG2, NFATC2IP and IFNAR1 (By similarity). Interacts with and methylates CHTOP, thereby enabling the interaction of CHTOP with the 5FMC complex (By similarity). Interacts with ILF3 and SUPT5H. Interacts with and methylates FOXO1, leading to the nuclear retention of FOXO1 and the stimulation of FOXO1 transcriptional activity. Methylation of FOXO1 is increased upon oxidative stress.</p> <p><b>Subcellular Location:</b>  Nucleus. Nucleus, nucleoplasm. Cytoplasm, cytosol. Note=Mostly found in the cytoplasm. Colocalizes with CHTOP within the nucleus. Low levels detected also in the chromatin fraction.</p> <p><b>Tissue Specificity:</b>  Widely expressed.</p>

**Similarity:**

Belongs to the protein arginine N-methyltransferase family.

**SWISS:**

Q99873

**Gene ID:**

3276

**Database links:**

[Entrez Gene: 476411](#)Dog

[Entrez Gene: 3276](#)Human

[Entrez Gene: 15469](#)Mouse

[Entrez Gene: 60421](#)Rat

[Omir: 602950](#)Human

[SwissProt: Q99873](#)Human

[SwissProt: Q9JIF0](#)Mouse

[SwissProt: Q63009](#)Rat

[Unigene: 20521](#)Human

[Unigene: 27545](#)Mouse

[Unigene: 5870](#)Rat

**Important Note:**

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