

Product datasheet for **TA385057**

PRMT1 Rabbit Monoclonal Antibody [Clone ID: R08-3H8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R08-3H8
Applications:	IHC, WB
Recommended Dilution:	WB: 1/1000 IHC: 1/20
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human PRMT1
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 43 kDa; Observed MW: 43 kDa
Gene Name:	protein arginine methyltransferase 1
Database Link:	Entrez Gene 3276 Human Q99873



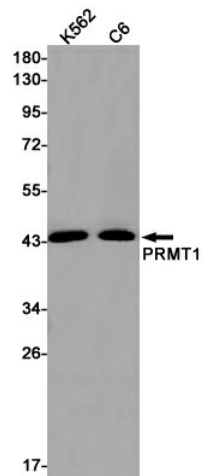
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Background:

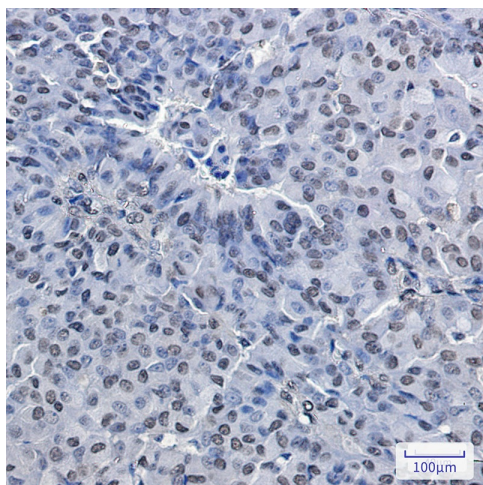
Swiss-Prot Acc.Q99873. Arginine methyltransferase that methylates (mono and asymmetric dimethylation) the guanidino nitrogens of arginyl residues present in proteins such as ESR1, histone H2, H3 and H4, PIAS1, HNRNPA1, HNRNPD, NFATC2IP, SUPT5H, TAF15, EWS, HABP4 and SERBP1 (PubMed:16879614, PubMed:26876602). 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 RBM15, promoting ubiquitination and degradation of RBM15 (PubMed:26575292). Methylates FOXO1 and retains it in the nucleus increasing its transcriptional activity. Methylates CHTOP and this methylation is critical for its 5-hydroxymethylcytosine (5hmC)-binding activity (PubMed:25284789). Methylates H4R3 in genes involved in glioblastomagenesis in a CHTOP- and/or TET1-dependent manner (PubMed:25284789).

Synonyms:

ANM1; HCP1; HMT2; HRMT1L2; IR1B4

Product images:

Western blot analysis of PRMT1 in K562, C6 lysates using PRMT1 antibody.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using PRMT1 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.