

Product datasheet for AR09075PU-L

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PRMT1 (Isoform 2) (1-353, His-MBP-tag) Mouse Protein

Product data:

Product Type: Recombinant Proteins

Description: PRMT1 (Isoform 2) (1-353, His-MBP-tag) mouse recombinant protein, 0.5 mg

Species: Mouse Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

MHHHHHMKI EEGKLVIWIN GDKGYNGLAE VGKKFEKDTG IKVTVEHPDK LEEKFPQVAA TGDGPDIIFW AHDRFGGYAQ SGLLAEITPD KAFQDKLYPF TWDAVRYNGK LIAYPIAVEA LSLIYNKDLL PNPPKTWEEI PALDKELKAK GKSALMFNLQ EPYFTWPLIA ADGGYAFKYE NGKYDIKDVG VDNAGAKAGL TFLVDLIKNK HMNADTDYSI AEAAFNKGET AMTINGPWAW

NGKYDIKDVG VDNAGAKAGL TFLVDLIKNK HMNADTDYSI AEAAFNKGET AMTINGPWAW
SNIDTSKVNY GVTVLPTFKG QPSKPFVGVL SAGINAASPN KELAKEFLEN YLLTDEGLEA
VNKDKPLGAV ALKSYEEELA KDPRIAATME NAQKGEIMPN IPQMSAFWYA VRTAVINAAS
GRQTVDEALK DAQTNSSSNN NNNNNNNNNLG IEGRGSHMAA AEAANCIMEV SCGQAESSEK
PNAEDMTSKD YYFDSYAHFG IHEEMLKDEV RTLTYRNSMF HNRHLFKDKV VLDVGSGTGI

LCMFAAKAGA RKVIGIECSS ISDYAVKIVK ANKLDHVVTI IKGKVEEVEL PVEKVDIIIS EWMGYCLFYE

IKEPLVDVVD PKQLVTNACL IKEVDIYTVK VEDLTFTSPF CLQVKRNDYV HALVAYFNIE FTRCHKRTGF

SMLNTVLHAR DKWLAPDGLI FPDRATLYVT AIEDRQYKDY KIHWWENVYG FDMSCIKDVA

STSPESPYTH WKQTVFYMED YLTVKTGEEI FGTIGMRPNA KNNRDLDFTI DLDFKGQLCE

LSCSTDYRMR

Tag: His-MBP-tag
Concentration: lot specific

Purity: ≥90 pure by SDS-PAGE

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 40 mM Tris-HCl pH 8.0 containing, 2 mM DTT, 100 mM NaCl, 4 mM MgCJ, 40%

glycerol

Bioactivity: Specific: Specific activity is > 30 nmol/min/mg, and is defined as the amount of enzyme that

transfer 1.0 nmole of methyl group per minute at 37°C.

Preparation: Liquid purified protein

Protein Description: Recombinant mouse PRMT1, fused to His-MBP tag at N-terminus, was expressed in E.coli and

purified by using conventional chromatography techniques.





PRMT1 (Isoform 2) (1-353, His-MBP-tag) Mouse Protein - AR09075PU-L

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 001239405

Locus ID: 15469

 UniProt ID:
 Q9JIF0, Q3UIG8

 Cytogenetics:
 7 29.07 cM

Synonyms: 6720434D09Rik; AW214366; Hrmt1l2; Mrmt1

Summary: 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, ILF3, HNRNPA1, HNRNPD, NFATC2IP, SUPT5H, TAF15, EWS, HABP4 and SERBP1 (PubMed:15327772, PubMed:19858291). 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 (By similarity).

Methylates H4R3 in genes involved in glioblastomagenesis in a CHTOP- and/or TET1-

dependent manner (By similarity). 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 (By similarity). Methylates RBM15, promoting ubiquitination and degradation of RBM15 (By similarity). Methylates CHTOP and this methylation is critical

for its 5-hydroxymethylcytosine (5hmC)-binding activity (PubMed:19858291).

[UniProtKB/Swiss-Prot Function]

Product images:

