

Active Recombinant Mouse Prmt1 Protein, His-MBP-tagged

Cat. No. Prmt1-7228M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse PRMT1, fused to His-MBP tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Mouse
Source	E.coli
ProteinLength	1-353
Description	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. 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. Methylates H4R3 in genes involved in glioblastomagenesis in a CHTOP- and/or TET1-dependent manner. 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. Methylates CHTOP and this methylation is critical for its 5-hydroxymethylcytosine (5hmC)-binding activity.
Form	Liquid

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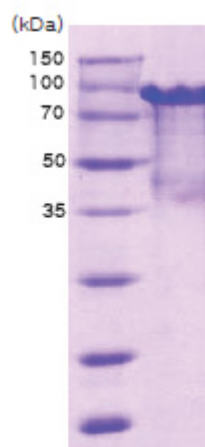
 45-1 Ramsey Road, Shirley, NY 11967, USA

Bio-activity	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 centigrade.
AA Sequence	MHHHHHMKIEEGKLVIWINGDKGYNGLAEVGGKFEKDTGIKVTVEHPDKLEEKFPQ VAATGDGPDIIFWAHDRFGGYAQSGLLAEITPDKAFQDKLYPFTWDAVRYNGKLIAY PIAVEALSLIYNKDLLPNPPKTWEEIPALDKELKAKGKSALMFNLQEPYFTWPLIAADG GYAFKYENGKYDIKDVGVNAGAKAGLTFLVDLIKHKHMNADTDYSIAEAAFNKGET AMTINGPWAWSNIDTSKVNYGVTVLPTFKGQPSKPFVGVLSAGINAASPNKELAKEF LENYLLTDEGLEAVNKDKPLGAVALKSYEEELAKDPRIAATMENAQKGEIMPNIQPM SAFWYAVRTAVINAASGRQTVDEALKDAQTNSSSSNNNNNNNNNNLGIENRGSHMA AAEAANCIMEVSCGQAESSEKPAEDMTSKDYYFDSYAHFGIHEEMLKDEVRTLTY RNSMFHNRHLFKDKVVLVDVSGTGILCMFAAKAGARKVIGIECSSISDYAVKIVKANK LDHVVTIIGKVEEVELPVEKVDIISEWMGYCLFYESMLNTVLHARDKWLPDGLIFP DRATLYVTAIEDRQYKDYKIHWWENVYGFDMSCIKDVAIKEPLVDVDPKQLVTNAC LIKEVDIYTVKVEDLTFTSPFCLQVKRNDYVHALVAYFNIEFTRCHKRTGFSTSPESPY THWKQTVFYMEDYLTVKTGEEIFGTIGMRPNKNNRDLDTIDLDFKGQLCELSCST DYRMR
Purity	≥ 90 % pure by SDS-PAGE
Stability	Shelf life: one year from despatch.
Storage	Store undiluted at 2-8 centigrade for up to two weeks or (in aliquots) at -20 or -70 centigrade for longer. Avoid repeated freezing and thawing.
Concentration	1.0 mg/mL (determined by Bradford assay)
Storage Buffer	40 mM Tris-HCl pH 8.0 containing, 2 mM DTT, 100 mM NaCl, 4 mM MgCl ₂ , 40 % glycerol

GENE INFORMATION

Gene Name	Prmt1 protein arginine N-methyltransferase 1 [Mus musculus (house mouse)]
Official Symbol	Prmt1
Synonyms	Prmt1; protein arginine N-methyltransferase 1; Hrmt1; Mrmt1; Hrmt1l2; AW214366; 6720434D09Rik; protein arginine N-methyltransferase 1; arginine N-methyltransferase 1; heterogeneous nuclear ribonucleoproteins methyltransferase-like 2; histone-arginine N-methyltransferase PRMT1; EC 2.1.1.319
Gene ID	15469
mRNA Refseq	NM_001252476
Protein Refseq	NP_001239405
UniProt ID	Q9JIF0

SDS-PAGE



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