

Product datasheet for **MC226598**

Prmt1 (NM_001252477) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prmt1 (NM_001252477) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Prmt1
Synonyms:	6720434D09Rik; AW214366; Hrmt1l2; Mrmt1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC226598 representing NM_001252477 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCAGCCGAGGCCGCGAACTGCATCATGGAGGTTTCTGTGGCCAAGCAGAAAGTAGTGAGAAGC
CCAACGCTGAGGACATGACATCCAAAGACTACTACTTTGACTCCTATGCCCACTTTGGCATCCACGAGGA
GATGCTGAAGGATGAGGTGCGCACCTCACATACCGAACTCCATGTTTCACAATCGGCATCTCTTCAA
GACAAGGTGGTGGTGGATGTGGGCTCAGGCACTGGCATCCTCTGCATGTTTGTGCCAAGGCGGGGGCCC
GCAAGGTTATTGGGATTGAGTGTCCAGTATCTCCGATTATGCTGTGAAGATTGTCAAAGCCAACAAGTT
AGACCATGTGGTGACCATCATCAAGGGCAAGGTGGAGGAGGTGGAGCTGCCCGTGGAGAAGGTGGACATC
TACACAGTCAAGGTGGAGGACCTGACCTTACCTCCCCCTTCTGCCTGCAAGTGAAGAGGAACGACTACG
TGCACGCGCTGGTGGCTTACTTCAACATCGAGTTCACCCGATGCCACAAGAGGACCGGCTTCTCCACCAG
TCCTGAGTCCCCGTACACACACTGGAAGCAGACTGTGTTCTACATGGAGGACTACCTAACAGTGAAGACT
GGCGAGGAGATCTTTGGCACCATTGGAATGAGGCCCAATGCCAAAAACAATCGTGACTTGGACTTTACCA
TCGACCTGGACTTCAAGGGTCAGCTGTGTGAGCTCTCTTGTTCACCGACTACCGGATGCGT**GA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001252477
Insert Size:	765 bp



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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001252477.1, NP_001239406.1</u>
RefSeq Size:	1028 bp
RefSeq ORF:	765 bp
Locus ID:	15469
Cytogenetics:	7 29.07 cM
Gene Summary:	<p>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).</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (3) has multiple differences in the coding region, compared to variant 1. The resulting protein (isoform 3) is shorter when it is compared to isoform 1.</p>