

Product datasheet for MR228809

Prmt1 (NM_001252477) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Prmt1 (NM_001252477) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Prmt1

Synonyms: 6720434D09Rik; AW214366; Hrmt1l2; Mrmt1

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >MR228809 representing NM_001252477
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR228809 representing NM_001252477

Red=Cloning site Green=Tags(s)

MAAAEAANCIMEVSCGQAESSEKPNAEDMTSKDYYFDSYAHFGIHEEMLKDEVRTLTYRNSMFHNRHLFK DKVVLDVGSGTGILCMFAAKAGARKVIGIECSSISDYAVKIVKANKLDHVVTIIKGKVEEVELPVEKVDI YTVKVEDLTFTSPFCLQVKRNDYVHALVAYFNIEFTRCHKRTGFSTSPESPYTHWKQTVFYMEDYLTVKT GEEIFGTIGMRPNAKNNRDLDFTIDLDFKGQLCELSCSTDYRMR

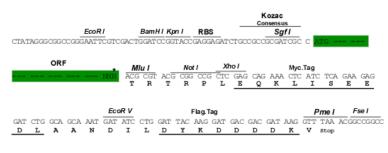
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

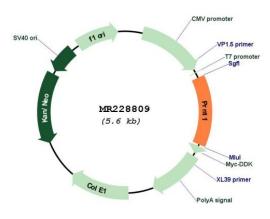
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001252477

ORF Size: 762 bp

Prmt1 (NM_001252477) Mouse Tagged ORF Clone - MR228809

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

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: 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.

RefSeq: <u>NM 001252477.1</u>, <u>NP 001239406.1</u>

RefSeq Size:1028 bpRefSeq ORF:765 bpLocus ID:15469

Cytogenetics: 7 29.07 cM

MW: 29.4 kDa

Gene 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]