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

Product datasheet for MR205164

Prmt1 (BC002249) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prmt1 (BC002249) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prmt1
Synonyms:	6720434D09Rik; AW214366; Hrmt1l2; Mrmt1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR205164 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGTTTCCTGTGGCCAAGCAGAAAGTAGTGAGAAGCCCAACGCTGAGGACATGACATCCAAAGACT
ACTACTTTGACTCCTATGCCCACTTTGGCATCCACGAGGAGATGCTGAAGGATGAGGTGCGCACCCTCAC
ATACCGCAACTCCATGTTTCACAATCGGCATCTCTTCAAAGACAAGGTGGTGCTGGACGTGGGCTCAGGC
ACTGGCATCCTCTGCATGTTTGCTGCCAAGGCGGGGGCCCGCAAGGTTATTGGGATTGAGTGTTCCAGTA
TCTCCGATTATGCTGTGAAGATTGTCAAAGCCAACAAGTTAGACCATGTGGTGACCATCATCAAGGGCAA
GGTGGAGGAGGTGGAGCTGCCCGTGGAGAAGGTGGACATCATCATCAGCGAGTGGATGGGTTACTGCCTC
TTCTACGAGTCCATGCTCAACACCGTGCTGCATGCTCGGGACAAGTGGCTGGCACCCGATGGCCTCATCT
TCCCAGACCGGGCCACCTTGTATGTGACAGCCATTGAGGACCGACAATATAAAGACTACAAGATCCACTG
GTGGGAGAACGTGTATGGCTTTGATATGTCCTGCATTAAAGACGTGGCCATCAAGGAGCCCCTGGTGGAC
GTGGTGGACCCAAAGCAGCTGGTCACCAATGCCTGCCTCATAAAGGAGGTGGACATCTACACAGTCAAGG
TGGAGGACCTGACCTTCACCTCCCCCTTCTGCCTGCAAGTGAAGAGGAACGACTACGTGCATGCGTTGGT
GGCTTACTTCAACATCGAGTTCACCCGATGCCACAAGAGGACCGGCTTCTCCACCAGTCCTGAGTCCCCG
TACACACACTGGAAGCAGACTGTGTTCTACATGGAGGACTACCTAACAGTGAAGACTGGCGAGGAGATCT
TTGGCACCATTGGAATGAGGCCCAATGCCAAAAACAATCGTGACTTGGACTTTACCATCGACCTGGACTT
CAAGGGTCAGCTGTGTGAGCTCTCTTGTTCCACCGACTACCGGATGCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

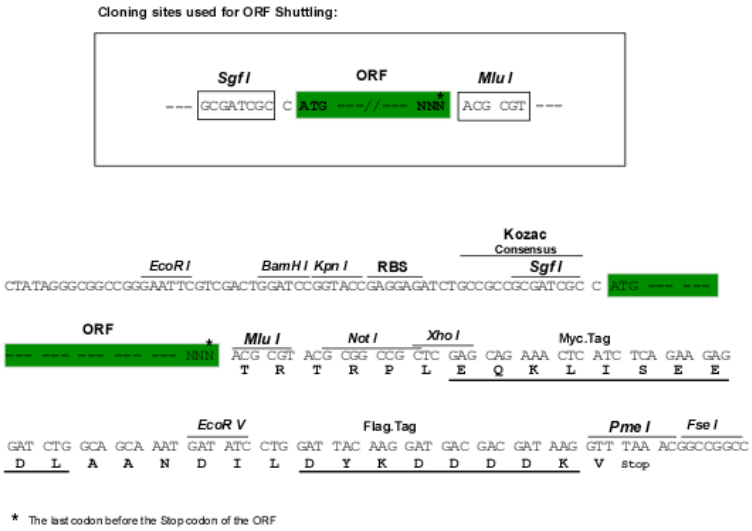
>MR205164 protein sequence
Red=Cloning site Green=Tags(s)

MEVSCGQAESSEKPNAEDMTSKDYYFDSYAHFGIHEEMLKDEVRTLTYRNSMFHNRHLFKDKVVLDVGSG
TGILCMFAAKAGARKVIGIECSSISDYAVKIVKANKLDHVVTIIKGKVEEVELPVEKVDIIISEWMGYCL
FYESMLNTVLHARDKWLAPDGLIFPDRATLYVTAIEDRQYKDYKIHWWENVYGFDMSCIKDVAIKEPLVD
VVDPKQLVTNACLIKEVDIYTVKVEDLTFTSPFCLQVKRNDYVHALVAYFNIEFTRCHKRTGFSTSPESP
YTHWKQTVFYMEDYLTVKTGEEIFGTIGMRPNAKNNRDLDFTIDLDFKGQLCELSCSTDYRMR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC002249

ORF Size: 1029 bp

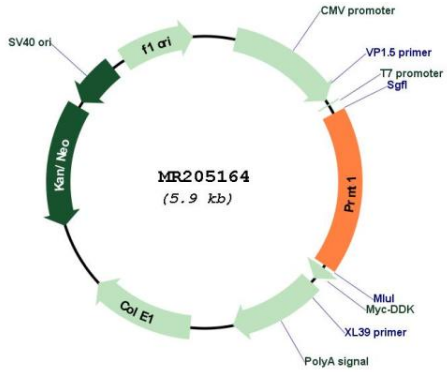
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	BC002249, AAH02249
RefSeq Size:	1213 bp
RefSeq ORF:	1031 bp
Locus ID:	15469
Cytogenetics:	7 29.07 cM
MW:	39.6 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]

Product images:



Circular map for MR205164