

Product datasheet for **RR214544**

Prmt7 (NM_001014153) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prmt7 (NM_001014153) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prmt7
Synonyms:	RGD1304869
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR214544 representing NM_001014153
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGTCTTCTGTGGCCGTGCCAATCCAACCACGGGATCCCTGGAATGGCTGGAGGAGGATGAACACT
 ATGATTACCACCAAGAAATTGCCAGTCACTCTATGCCGATATGCTACACGACAAAGACAGAAATATAAA
 ATATTACCAGGGTATCCGGGCAGCTGTGAGCAGAGTAAAAGACAAAGACAGAAGGCCTTGGTTCTTGAC
 ATTGGCACTGGCAGGCCTCTTATCAATGATGGCAGTTACCGCAGGGGCTGACTTCTGCTATGCTGTTG
 AGGTTTTTAAGCCAATGGCTGAGGCTGCTGTGAAGATTGTGGAGAAAAATGGCTTCAGTGATAAGATTAA
 AGTAATTAACAAGCATTCCACTGAGGTGACGGTTGGACCAGATGGTGACTTGCCATGCCGTGCTAACATT
 CTGTTTACGGAGCTGTTGACACAGAGCTGATTGGGGAGGGAGCACTGCCCTCTTATGAGCACGCACACA
 AGCATCTTGTACAGGAAGACTGTGAAGCAGTGCCTCACAGGGCGACTGTCTATGCCCAGTTGGTGGAGTC
 CAAAAGGATGTGGTCATGGAACAAGCTGTTTCCCTGTCCGGGTCCAGACTGGTCTTGAGAGCAGCTTATC
 ATTCTCCCTCAGAATTGGAGAGGTGTCCTGGTGACCTTCCGTCTATGACATTCAGCTGAACCAGGTGT
 CACCTGCTGACTTCACTGTCTCAGTGATGTGCTGCCAATGTTACAGCTGGACTTCAGCAAGCAAGTCAG
 CAGCTCGGCAGCGTGCCATAGCAAGCAGTTTGTCCCTCTGGCATCTGGCCAAGCACAGGTGGTTCTCTCC
 TGGTGGGACATAGAAATGGACCTGAGGGCAAGATCAAGTGCACCATGGCACCCCTTTTGGGCACAGACAG
 ATCCACAGGAACCTCAGTGGCGGGACCACTGGATGCAGTGTGTACTTCTGCCCCAGGAGGAGCCCAT
 TATGCAGGGCTCACCCCGATGCCTGGCTGCTCACCATGATGACTACTGTGTGGTACAGCCTTCAGAGA
 ACCAGCCCTGATGAGAATAACAGTGCCTACCAAGTTCGACCTGTATGTGACTGTGAGGCTCACCTGCTCT
 GGAACCGGCCACGGTTTGGAGAGATCAATGATCAGGACAGAAGTACTACTATGCCCGAGCCCTGAGGAC
 TATGCTGATGCCAGGTAGCATCTGCCTTTGTGTGAGTGACGGCAGTCTACTCTGTGTTGGCCCATCAC
 CTTGGAGCAGAGCAGGTGTTTACAGTCGAGAGTTCAGTAGCTTCCCTATAGACTGATGAAAAGGATCTTCA
 AGGTTAACCACTTGAAGATAAAATTACCGTCATCAATAAACGGCCTGAGTTGTTGACATCTGCAGACCT
 GGAGGGTAAGAAGGTCTCCCTCCTGGGTGAACCTTTTTTACCACCAGCCTGCTACCATGGCACAAC
 CTGTAATTCTGGTATGTGCGCACCTCTGTGGACCAGCACCTAGCGCCTGGGGCTGTGGTATGCCCCAGG
 CAGCCTCACTGCATGCCGTGATCGTGGAGTTCAGGGACCTGTGGCAATCCGGAGTCTTGTGGTGACTG
 TGAAGGGTTTACGTCCACATCATGGATGATATGATCAAGCACTCCCTGGATTTCCGAGAGAGCAGGGAG
 GCAGAGCCACAGCCACTGTGGGAATACCCCTGCAGAAGCCTCTCAGAGCCTCGACAGATCCTGACTTTTG
 ATTTCCAGCAGCCATCCCCAGCAGCCTATGCAATCCAGGGCGTGATGGAAGTGGAGGAGCCCGGAA
 GAGCCATGGAGCTGTCCTGTGGATGGAATACCAGCTGACTCCAGATAGCACTGTCAGCACCGGCCTCATG
 AACCTGCAGAGGACAAGGGGGACTGCTGCTGGAACCCCACTGCAAGCAAGCTGTGACTTCTCATGTG
 CCACACTGGATCCTAGCGCGCCTCTGGATGGCCCTCAATCAGTCAGCTATGCTGTGGAGTTTACCCCT
 CACTGGAGACATCCCATGGAGTTTAGGCTTGACAGACGACACCTGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR214544 representing NM_001014153
Red=Cloning site Green=Tags(s)

MKVFCGRANPTTGSLEWLEEDEHYDHYQEIARSSYADMLHDKDRNIKYYQGIRAAVSRVKDKGQKALVLD
 IGTGTGLLSMMAVTAGADFCYAVEVFKPMAEAAVKIVEKNGFSDKIKVINKHSTEVTVGPDGDLPCRANI
 LVTELFDTTELIGEGALPSYEHAKHLVQEDCEAVPHRATVYAQLVESKRMWSWNKLFVVRVQTGLGEQLI
 IPPSELERCPGAPSVYDIQLNQVSPADFTVLSDVLPMSVDFSKQVSSAACHSKQFVPLASGQAQVLS
 WWDIEMDPEGKIKCTMAPFWAQTDPQELQWRDHWMQCVYFLPQEPIMQGSPRCLAAHDDYCVWYSLQR
 TSPDENNSAYQVRPVCDCAHLLWNRPRFGEINDQDRTDHYARALRTMLMPGSI CLCVSDGSLLSVLAHH
 LGAEQVFTVESSVASYRLMKRIFKVNHLEDKITVINKRPELLTSADLEGKVSLLLGEFFTTSLLPWHN
 LYFWYVRTSVDQHLAPGAVVMPQAASLHAVIVEFRDLWRIRSPCGDCEGFDVHIMDDMIKHSDFRESRE
 AEPQPLWEYPCRSLSERQILTFDFQQPQPMPQSRGMELRRPGKSHGAVLWMEYQLTPDSTVSTGLM
 NPAEDKGDCCWNPCHKQAVYFLSATLDPSAPLDGPOSVSYAVEFHPLTGDITMEFRLADDTLN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001014153

ORF Size: 2079 bp

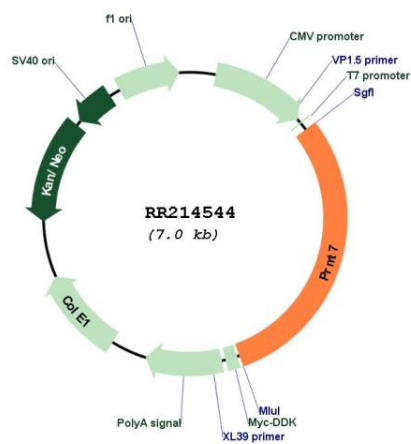
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
RefSeq:	NM_001014153.1 , NP_001014175.1
RefSeq Size:	2325 bp
RefSeq ORF:	2082 bp
Locus ID:	361402
UniProt ID:	Q5U4E8
Cytogenetics:	19q12
MW:	78.3 kDa
Gene Summary:	<p>Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA), with a preference for the formation of MMA. Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3); such methylation being required for the assembly and biogenesis of snRNP core particles. Specifically mediates the symmetric dimethylation of histone H4 'Arg-3' to form H4R3me2s. Plays a role in gene imprinting by being recruited by CTCFL at the H19 imprinted control region (ICR) and methylating histone H4 to form H4R3me2s, possibly leading to recruit DNA methyltransferases at these sites. May also play a role in embryonic stem cell (ESC) pluripotency. Also able to mediate the arginine methylation of histone H2A and myelin basic protein (MBP) in vitro; the relevance of such results is however unclear in vivo.</p> <p>[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for RR214544