

Product datasheet for **MR210073**

Prmt7 (NM_145404) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prmt7 (NM_145404) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prmt7
Synonyms:	4933402B05Rik; BC006705
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210073 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGTCTTCTGTGGCCGTGCCAATCTACCACGGGATCCCTGGAGTGGCTGGAGGAGGATGAACACT
 ATGATTACCACCAGGAGATTGCCAGGTCATCCTATGCCGACATGCTACATGACAAAGACAGAAATATAAA
 ATACTACCAGGGTATCCGGGCAGCTGTGAGCAGGGTAAAAGACAGAGGACAGAAGGCCTTGGTTCTTGAC
 ATTGGCACTGGCACAGGCCTCTTGTCAATGATGGCAGTTACTGCAGGGGCTGACTTCTGCTATGCTATCG
 AGGTTTTTAAGCCTATGGCTGAGGCTGTGTAAGATTGTGGAGAGGAATGGCTTCAGTGATAAGATTAA
 AGTCATTAACAAGCACTCCACTGAGGTGACAGTCGGACCAGATGGTGACTTGGCTGTCTGCTAACATT
 CTGATCACGGAGCTGTTTACACAGAGCTGATTGGGGAGGGAGCGCTGCCCTCTTATGAGCATGCACACA
 AGCATCTTGTCCAGGAAGACTGCGAGGCAGTGCCACACAGGGCAACTGTCTATGCCAGCTGGTGGAGTC
 CCGAAGGATGTGGTCTGGAACAAGCTGTTTCCCGTCCGTGTCCGGACGAGTCTAGCGCAGCAGGTATC
 GTCCCCCCTCAGAATTGGAGAGGTGTCCTGGTGCGCCTTCAGTCTGTGACATTCAGCTGAACCAGGTGT
 CGCCTGTGACTTCACTGTCTCAGTGATGTGCTGCCAATGTTACGCGTGGACTTCAGCAAGCAAGTCAG
 CAGCTCGGCAGCGTGCCATAGCAGGCAGTTGTACCTTTGGCGTCTGGCCAAGCACAGGTGGTTCTGTCC
 TGGTGGGACATTGAAATGGACCCGTAGGGCAAGATCAAGTGCACCATGGCACCCCTTTTGGGCACAGACAG
 ATCCGCAGGAGCTTCAGTGGCGGGACCACTGGATGCAGTGTGTACTTCTGCCGAGGAGGAGCCTGT
 TGTGCAGGGCTCACCCCGGTGCCTGGTAGCCACCATGATGACTACTGTGTGTGGTACAGCCTTCAGAGA
 ACCAGCCCTGATGAGAACGACAGCGCCTACCAAGTGCACCTGTGTGACTGTGACTGTGACTGTGACTGT
 GAAACCGCCTCGGTTTGGAGAAATCAATGATCAGGACAGAAGTACTACTATGCCAGGCCCTGAGGAC
 TGTGCTGCTGCCAGGTAGCGTCTGCCTTTGTGTGAGTGATGGCAGTCTCCTCTCCATGCTGGCCCATCAC
 CTCGGAGCGGAGCAGGTGTTTACAGTTGAGAGTTCAGTAGCTTCTATAGACTGATGAAAAGGATCTTCA
 AGGTTAACCACTTGAAGATAAAATCAGTGTCAATAAACGGCCTGAGTTGCTGACAGCTGCAGACCT
 GGAGGGCAAGAAGGTCTCCCTCCTGGGTGAACCTTTTACCACCAGCCTGCTGCCATGGCACAAC
 CTGTACTTCTGGTATGTCGTACCTCTGTGGACCAGCACCTAGCACCTGGAGCTGTGGTATGCCTCAGG
 CTGCCTCACTGCATGCCGTGATTGTGGAGTTCAGGGACCTGTGGCGATCCGGAGTCTTGGCGTGACTG
 CGAAGGTTTTGATGTGCACATCATGGATGATATGATCAAGCACTCCCTGGATTTCCGAGAGAGCAGAGAG
 GCAGAGCCACACCACTGTGGGAATACCCCTGCAGAAGCCTCTCAAGCCTCAAGAGATCCTGACTTTTG
 ATTTCCAGCAGCCATCCCCAACAGCCTATGCAATCCAAGGGCACAATGGAGCTGACAAGACCCGGGAA
 GAGCCATGGGGCTGTCCTGTGGATGGAGTATCAGCTCACTCCAGACAGCAGATCAGCACTGGCCTCATA
 AACCTGCAGAAGACAAGGGGGACTGCTGCTGGAACCCCACTGCAAGCAAGCTGTGACTTCTCAGCA
 CCACGCTGGATCTCAGAGTGCCTCTGAATGGCCCTCGGTGAGTATGTTGTGGAGTTTACCCCT
 CACTGGAGACATCACCATGGAGTTTAGGCTTGACAGACACCTTGAGC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210073 protein sequence
 Red=Cloning site Green=Tags(s)

MKVFCGRANPTTGSLEWLEEDHYDHYQEIARSSYADMLHDKDRNIKYYQGIRAAVSRVKDRGQKALVLD
 IGTGTGLLSMMAVTAGADFCYAIIEVFKPMAEAAVKIVERNGFSDKIKVINKHSTEVTVGPDGLPCRANI
 LITELFDTELIGEGALPSYEHAKHLVQEDCEAVPHRATVYVYQLVESRRMWSWNKLFVVRVRTLGEQVI
 VPPSELERCPGAPSVCDIQLNQVSPADFTVLSDVLPMSVDFSKQVSSAACHSRQFVPLASGQAQVLS
 WWDIEMDPEGKIKCTMAPFWAQTDPQELQWRDHWMQCVYFLPQEEPVVQGSRCLVAHDDYCVWYSLQR
 TSPDENDSAYQVRPVCDQAHLLWNRPRFGEINDQDRTDHYAQLRVTLLPGSVCLCVSDGSLLSMLAHH
 LGAEQVFTVESSVASYRLMKRIFKVNHLKDISVINKRPELLTAADLEGKVSLLLGEFFTTSLLPWHN
 LYFWYVRTSVDQHLAPGAVVMPQAASLHAVIVEFRDLWRIRSPCGDCEGFVHIMDDMIKHSDFRESRE
 AEPHPLWEYPCRSLSKPQEILTFDFQQPIQQPMQSKGTMELTRPGKSHGAVLWMEYQLTPDSTISTGLI
 NPAEDKGDCCWNPCHKQAVYFLSTTDLRVPLNGPRSVSVVVEFHPLTGDITMEFRLADTLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_145404

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:

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_145404.1](#), [NP_663379.1](#)

RefSeq Size: 2269 bp

RefSeq ORF: 2079 bp

Locus ID: 214572

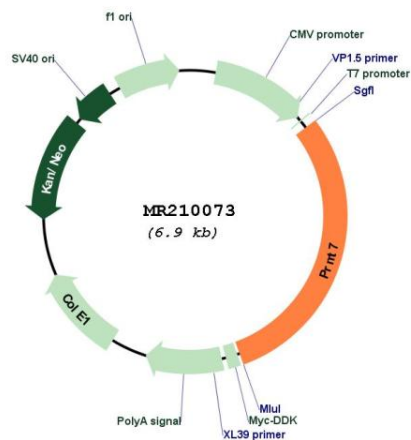
UniProt ID: [Q922X9](#)

Cytogenetics: 8 D3

MW: 78.3 kDa

Gene Summary: 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 (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210073