

Product datasheet for MR205897

Prmt6 (NM_178891) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prmt6 (NM_178891) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prmt6
Synonyms:	AW124876; BB233495; Hrmt116
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205897 representing NM_178891 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGCTGAGCAAGAAAAGAAAGCTTGAGTCGGGGACAGCGGAGCGCCGGCGCCGGAGGGGAGGGAG
CCGAGGAGGAAAATGGCGGGGAGCAGGAGGCGGCCCGCCACGACCCGGAGGACCAAGAGCGAGCGGGA
CCAGCTGTACTACGAGTCTACTCCGACGTCTCGGTCCACGAGGAGATGATCGCCGACCAGGTCCGCACC
GAAGCCTACCGCTTAGGCATCCTGAAGAACTGGGCCGCGCTGCGAGGCAAGACGGTCTGGACGTGGGCG
CGGCACCGGCATTCTCAGCATTTCTGTGCCAGGCCGGGCACGGCGGTGTACGCGGTGGAGGCCAG
CGCATCTGGCAACAGGCCCGGGAGGTGGTGGCGCTCAACGGGTTGGAGGACCGCGTGCACGTCTGCCG
GGCCCGGTGGAGACCGTGGAGCTGCCGGAGCGAGTGGACGCCATCGTCAGCGAGTGGATGGGCTACGGAC
TTCTGCACGAGTCCATGCTGAGCTCCGTGCTCCACGCGCGGACCAATGGCTGAAGGAGGGCGGTCTCCT
CCTGCCAGCTTCCGCGGAGCTTCTCGTGGCCCCGATTAGCGACCAGATGCTCGAGTGGCGTCTGGGTTTC
TGGAGCCAGGTGAAGCAGCACTATGGCGTGATATGAGCTGCATGGAGAGCTTCGCCACGCGCTGCCTCA
TGGGCCATTCGGAGATCGTGGTGCAGGATCTGTCCGGAGAGGACGTGCTGGCCCGGCCGACGCGCTTTC
CCAGCTCGAGCTGGCCCGAGCCGGCCTGGAGCAGGAGCTGGAGGCTGGTGTGGCCGGGCGCTTCCGCTGC
AGCTGCTATGGTTCGCGCCTCTACATGGTTTCGCCGTCTGGTTTCAAGTGACCTTCCCGAGGGGACT
CGGAGAAACCTCTGGTGTGTCCACCTCGCCTTTTACCCGGCCACCCACTGGAAGCAGGCGCTCCTCTA
CTTGAACGAGCCGGTGGCGGTGGAACAAGATACGGACATTTCCGGAGAGATCACCCCTGCTGCCCTCCCCG
GACAACCCCGCGCTCTGCGCATACTTCTGCGCTACAAAGTGGGAGACCATGAGGAAAAGACCAAAGACT
TTGCCATGGAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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_178891.5](#), [NP_849222.3](#)

RefSeq Size: 2475 bp

RefSeq ORF: 1137 bp

Locus ID: 99890

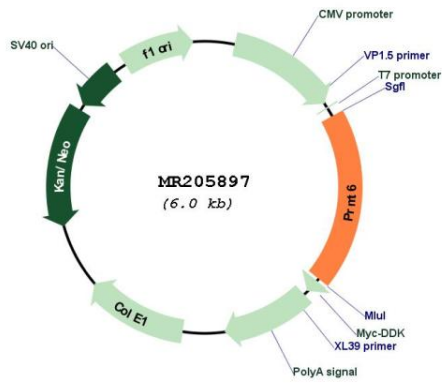
UniProt ID: [Q6NZB1](#)

Cytogenetics: 3 F3

MW: 42.3 kDa

Gene Summary: Arginine methyltransferase that can catalyze the formation of both omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA (PubMed:22904064, PubMed:26070566). Preferentially methylates arginyl residues present in a glycine and arginine-rich domain and displays preference for monomethylated substrates (By similarity). Specifically mediates the asymmetric dimethylation of histone H3 'Arg-2' to form H3R2me2a (By similarity). H3R2me2a represents a specific tag for epigenetic transcriptional repression and is mutually exclusive with methylation on histone H3 'Lys-4' (H3K4me2 and H3K4me3) (By similarity). Acts as a transcriptional repressor of various genes such as HOXA2, THBS1 and TP53 (PubMed:22904064). Repression of TP53 blocks cellular senescence (PubMed:22904064). Also methylates histone H2A and H4 'Arg-3' (H2AR3me and H4R3me, respectively). Acts as a regulator of DNA base excision during DNA repair by mediating the methylation of DNA polymerase beta (POLB), leading to the stimulation of its polymerase activity by enhancing DNA binding and processivity. Methylates HMGA1. Regulates alternative splicing events. Acts as a transcriptional coactivator of a number of steroid hormone receptors including ESR1, ESR2, PGR and NR3C1. Promotes fasting-induced transcriptional activation of the gluconeogenic program through methylation of the CRT2 transcription coactivator (PubMed:24570487). Methylates GPS2, protecting GPS2 from ubiquitination and degradation (PubMed:26070566).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205897