

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; Hrmt1l6

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >MR205897 representing NM_178891

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCGCTGAGCAAGAAAAGAAAGCTTGAGTCGGGGGACAGCGGAGGCGCCGGCGGCGGCGGAGGGGAGGGAG CCAGCTGTACTACGAGTGCTACTCCGACGTCTCGGTCCACGAGGAGATGATCGCCGACCAGGTCCGCACC GAAGCCTACCGCTTAGGCATCCTGAAGAACTGGGCCGCGCTGCGAGGCAAGACGGTGCTGGACGTGGGCG CGGGCACCGGCATTCTCAGCATCTTCTGTGCCCAGGCCGGGGCACGGCGCGTGTACGCGGTGGAGGCCAG CGCCATCTGGCAACAGGCCCGGGAGGTGGTGCGGCTCAACGGGTTGGAGGACCGCGTGCACGTCCTGCCG GGCCCGGTGGAGACCGTGGAGCTGCCGGAGCGAGTGGACGCCATCGTCAGCGAGTGGATGGGCTACGGAC TTCTGCACGAGTCCATGCTGAGCTCCGTGCTCCACGCGCGGACCAAATGGCTGAAGGAGGGCGGTCTCCT CCTGCCAGCTTCCGCGGAGCTCTTCGTGGCCCCGATTAGCGACCAGATGCTCGAGTGGCGTCTGGGTTTC TGGAGCCAGGTGAAGCAGCACTATGGCGTGGATATGAGCTGCATGGAGAGCTTCGCCACGCGCTGCCTCA TGGGCCATTCGGAGATCGTGCTGCAGGATCTGTCCGGAGAGGACGTGCTGGCCCGGCCGCAGCGCTTTGC AGCTGCTATGGTTCCGCGCCTCTACATGGTTTCGCCGTCTGGTTTCAAGTGACCTTTCCCGGAGGGGACT CTTGAACGAGCCGGTGCCGGTGGAACAAGATACGGACATTTCCGGAGAGATCACCCTGCTGCCCTCCCCG GACAACCCCGGCGTCTGCGCATACTTCTGCGCTACAAAGTGGGAGACCATGAGGAAAAGACCAAAGACT TTGCCATGGAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >MR205897 representing NM_178891

Red=Cloning site Green=Tags(s)

MSLSKKRKLESGDSGGAGAGGEGAEENGGEQEAAPPRPRRTKSERDQLYYECYSDVSVHEEMIADQVRT EAYRLGILKNWAALRGKTVLDVGAGTGILSIFCAQAGARRVYAVEASAIWQQAREVVRLNGLEDRVHVLP GPVETVELPERVDAIVSEWMGYGLLHESMLSSVLHARTKWLKEGGLLLPASAELFVAPISDQMLEWRLGF WSQVKQHYGVDMSCMESFATRCLMGHSEIVVQDLSGEDVLARPQRFAQLELARAGLEQELEAGVGGRFRC SCYGSAPLHGFAVWFQVTFPGGDSEKPLVLSTSPFHPATHWKQALLYLNEPVPVEQDTDISGEITLLPSP DNPRRLRILLRYKVGDHEEKTKDFAMED

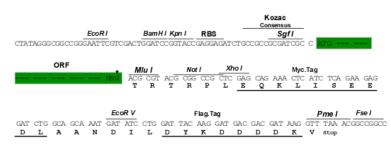
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9036 c02.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_178891

ORF Size: 1134 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: <u>NM 178891.5</u>, <u>NP 849222.3</u>

RefSeq Size:2475 bpRefSeq ORF:1137 bpLocus ID:99890UniProt ID:Q6NZB1Cytogenetics: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

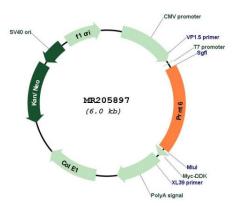
(PubMed:22904064). Repression of TP53 blocks cellular senescence (PubMed:22904064). Also methylates histone H2A and H4 'Arg-3' (H2AR3me and H4R3me, respectively). Acts as a regulator of DNA base excision during DNA repair by mediating the methylation of DNA polymerase beta (POLB), leading to the stimulation 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 CRTC2 transcription coactivator

(PubMed:24570487). Methylates GPS2, protecting GPS2 from ubiquitination and degradation

(PubMed:26070566).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR205897