

## Product datasheet for **TP505897**

### Prmt6 (NM\_178891) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse protein arginine N-methyltransferase 6 (Prmt6), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR205897 representing NM_178891 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MSLSKKRKLES GDSGGAGAGGEGAE EENGGEQEAAPPRPRRTKSERDQLYYECYSDVSVHEEMIADQVRT  
EAYRLGILKNWAALRGKTVLDVGAGTGILSIFCAQAGARRVYAVEASAIWQQAREVRLNGLED RVHVLP  
GPVETVELPERVDAIVSEWMGYGLLHESMLSSVLHARTKWLKEGGLLLPASAE L FVAPISDQMLEWRLGF  
WSQVKQHYGVDMSCMESFATRCLMGHSEIVVQDLSGEDVLARPQRFAQLELARAGLEQE LEAGVGGFRFC  
SCYGSAPLHGFAVWFQVTFPGGDEKPLVLSTSPFHPATHHWKQALLYLN E PVPVEQD TDISGEITLLPSP  
DNPRLRILLRYKVG DHEEKT KDFAMED

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	42.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_849222</a>
Locus ID:	99890
UniProt ID:	<a href="#">Q6NZB1</a>



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RefSeq Size: 2475

Cytogenetics: 3 F3

RefSeq ORF: 1134

Synonyms: AW124876; BB233495; Hrmt116

**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]