

## Product datasheet for **TR515539**

### Prmt6 Mouse shRNA Plasmid (Locus ID 99890)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Prmt6 Mouse shRNA Plasmid (Locus ID 99890)
Locus ID:	99890
Synonyms:	AW124876; BB233495; Hrmt116
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Prmt6 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 99890). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC022899</a> , <a href="#">BC066221</a> , <a href="#">NM_178891</a> , <a href="#">NR_024139</a> , <a href="#">NM_178891.1</a> , <a href="#">NM_178891.2</a> , <a href="#">NM_178891.3</a> , <a href="#">NM_178891.4</a> , <a href="#">NM_178891.5</a>
UniProt ID:	<a href="#">Q6NZB1</a>



[View online »](#)

**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]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).