

Product datasheet for **TR302288**

PRDM9 Human shRNA Plasmid Kit (Locus ID 56979)

Product data:

Product Type:	shRNA Plasmids
Product Name:	PRDM9 Human shRNA Plasmid Kit (Locus ID 56979)
Locus ID:	56979
Synonyms:	KMT8B; MEISETZ; MSBP3; PFM6; ZNF899
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PRDM9 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 56979). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_020227 , NM_020227.1 , NM_020227.2 , NM_020227.3 , NM_020227.4
UniProt ID:	Q9NQV7
Summary:	The protein encoded by this gene is a zinc finger protein with histone methyltransferase activity that catalyzes histone H3 lysine 4 trimethylation (H3K4me3) during meiotic prophase. This protein contains multiple domains, including a Kruppel-associated box (KRAB) domain, an SSX repression domain (SSXRD), a PRD1-BF1 and RIZ homologous region, a subclass of SET (PR/SET) domain, and a tandem array of C2H2 zinc fingers. The zinc finger array recognizes a short sequence motif, leading to local H3K4me3, and meiotic recombination hotspot activity. The observed allelic variation alters the DNA-binding sequence specificity of the protein, resulting in distinct meiotic recombination hotspots amongst individuals and populations. Multiple alternate alleles of this gene have been described. [provided by RefSeq, Jul 2015]
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 . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).