

## **Product datasheet for TL302288**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## 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: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** PRDM9 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 56979).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, 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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## 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).