

## Product datasheet for TR317274

## 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

## RNMTL1 (MRM3) Human shRNA Plasmid Kit (Locus ID 55178)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** RNMTL1 (MRM3) Human shRNA Plasmid Kit (Locus ID 55178)

Locus ID:

RMTL1; RNMTL1 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell

Puromycin

Selection: Format:

Retroviral plasmids

Components: MRM3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

55178). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

NM 001317947, NM 018146, NM 018146.1, NM 018146.2, NM 018146.3, BC011550, RefSeq:

BC011550.1, BC050614, NM 018146.4

UniProt ID: Q9HC36

**Summary:** Efficient translation of mitochondrial-derived transcripts requires proper assembly of the

> large subunit of the mitochondrial ribosome. Central to the biogenesis of this large subunit is the A-loop of mitochondrial 16S rRNA, which is modified by three rRNA methyltransferases located near mtDNA nucleoids. The protein encoded by this gene methylates G(1370) of 16S rRNA, and this modification is necessary for proper ribosomal large subnit assembly. Two transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Dec 2015]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> be certain that your variant of interest is targeted, please contact <a href="techsupport@origene.com">techsupport@origene.com</a>. 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).