

## Product datasheet for **TR511677**

### Mgme1 Mouse shRNA Plasmid (Locus ID 74528)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Mgme1 Mouse shRNA Plasmid (Locus ID 74528)
Locus ID:	74528
Synonyms:	8430406I07Rik; AI426476
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Mgme1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 74528). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC063088</a> , <a href="#">NM_001289630</a> , <a href="#">NM_001289631</a> , <a href="#">NM_028984</a> , <a href="#">NM_001355688</a> , <a href="#">NM_028984.1</a> , <a href="#">NM_028984.2</a> , <a href="#">NM_028984.3</a> , <a href="#">NM_028984.4</a> , <a href="#">NM_028984.5</a> , <a href="#">NM_001289630.1</a> , <a href="#">NM_001289631.1</a> , <a href="#">BM942022</a>
UniProt ID:	<a href="#">Q9CXC3</a>
Summary:	Metal-dependent single-stranded DNA (ssDNA) exonuclease involved in mitochondrial genome maintenance. Has preference for 5'-3' exonuclease activity but is also capable of endonuclease activity on linear substrates. Necessary for maintenance of proper 7S DNA levels. Probably involved in mitochondrial DNA (mtDNA) repair, possibly via the processing of displaced DNA containing Okazaki fragments during RNA-primed DNA synthesis on the lagging strand or via processing of DNA flaps during long-patch base excision repair (By similarity). Specifically binds 5-hydroxymethylcytosine (5hmC)-containing DNA in stem cells. [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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](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).