

## Product datasheet for **TR506246**

### Sgms1 Mouse shRNA Plasmid (Locus ID 208449)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Sgms1 Mouse shRNA Plasmid (Locus ID 208449)
Locus ID:	208449
Synonyms:	9530058O11Rik; AI841905; C80702; Mob; Sms1; Sor1; Tmem23
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Sgms1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 208449). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC019443</a> , <a href="#">BC085298</a> , <a href="#">NM_001168525</a> , <a href="#">NM_001168526</a> , <a href="#">NM_144792</a> , <a href="#">NM_144792.1</a> , <a href="#">NM_144792.2</a> , <a href="#">NM_144792.3</a> , <a href="#">NM_144792.4</a> , <a href="#">NM_001168526.1</a> , <a href="#">NM_001168525.1</a> , <a href="#">BC076618</a> , <a href="#">NM_001362423</a> , <a href="#">NM_144792.5</a>
UniProt ID:	<a href="#">Q8VCQ6</a>
Summary:	Sphingomyelin synthases synthesize the sphingolipid, sphingomyelin, through transfer of the phosphatidyl head group, phosphatidylcholine, on to the primary hydroxyl of ceramide. The reaction is bidirectional depending on the respective levels of the sphingolipid and ceramide. Golgi apparatus SMS1 directly and specifically recognizes the choline head group on the substrate, requiring two fatty chains on the choline-P donor molecule in order to be recognized efficiently as a substrate. Major form in macrophages. Required for cell growth in certain cell types (By similarity). Suppresses BAX-mediated apoptosis and also prevents cell death in response to stimuli such as hydrogen peroxide, osmotic stress, elevated temperature and exogenously supplied sphingolipids. May protect against cell death by reversing the stress-inducible increase in levels of proapoptotic ceramide.[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).