

## **Product datasheet for TR307632**

## OriGene Technologies, Inc.

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## Sphingomyelin Synthase 2 (SGMS2) Human shRNA Plasmid Kit (Locus ID 166929)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Sphingomyelin Synthase 2 (SGMS2) Human shRNA Plasmid Kit (Locus ID 166929)

**Locus ID:** 166929

**Synonyms:** CDL; SMS2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: SGMS2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

166929). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001136257, NM 001136258, NM 152621.1, NM 152621.1, NM 152621.2, NM 152621.3,

NM 152621.4, NM 152621.5, NM 001136257.1, NM 001136258.1, BC041369, BC041369.2,

BC028705, NM 001136258.2, NM 152621.6, NM 001136257.2

UniProt ID: Q8NHU3

**Summary:** Sphingomyelin, a major component of cell and Golgi membranes, is made by the transfer of

phosphocholine from phosphatidylcholine onto ceramide, with diacylglycerol as a side product. The protein encoded by this gene is an enzyme that catalyzes this reaction primarily at the cell membrane. The synthesis is reversible, and this enzyme can catalyze the reaction in either direction. The encoded protein is required for cell growth. Three transcript variants encoding the same protein have been found for this gene. There is evidence for more

variants, but the full-length nature of their transcripts has not been determined.[provided by

RefSeq, Oct 20081

**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 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).