

## **Product datasheet for TR512368**

## Scnm1 Mouse shRNA Plasmid (Locus ID 69269)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Scnm1 Mouse shRNA Plasmid (Locus ID 69269)

**Locus ID:** 69269

Synonyms: 3110001I17Rik; Scnm1-ps

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Scnm1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

69269). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC028867, NM 001163573, NM 027013, NM 027013.1, NM 027013.2, NM 001163573.1</u>

UniProt ID: Q8K136

**Summary:** Mutations in the voltage-gated sodium channel gene Scn8a lead to neurological problems in

mice. For one particular mutation, Scn8amedJ, mice live to adulthood but have tremors and muscle weakness, among other problems, in all strains except those derived from C57BL6 mice. In these strains, the product of the Scnm1 gene (229 aa) partially overcomes the effects of the Scn8amedJ mutation. However, in C57BL6-derived mice, a one nt change in the

penultimate exon creates a premature stop codon, truncating the Scnm1 protein at 186 aa. This truncated protein lacks the ability to overcome the effects of the Scn8amedJ mutation,

and these mice suffer paralysis and juvenile death. [provided by RefSeq, Jul 2009]

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>.



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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).