

## **Product datasheet for TR309833**

#### OriGene Technologies, Inc.

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### **RGS4 Human shRNA Plasmid Kit (Locus ID 5999)**

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** RGS4 Human shRNA Plasmid Kit (Locus ID 5999)

**Locus ID:** 5999

**Synonyms:** RGP4; SCZD9

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: RGS4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5999). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001102445, NM 001113380, NM 001113381, NM 005613, NM 005613.2, NM 005613.3,

NM 005613.4, NM 005613.5, NM 001102445.1, NM 001102445.2, NM 001113381.1,

NM 001113380.1, BC051869, BC051869.1, BC000737, NM 005613.6

UniProt ID: P49798

**Summary:** Regulator of G protein signaling (RGS) family members are regulatory molecules that act as

GTPase activating proteins (GAPs) for G alpha subunits of heterotrimeric G proteins. RGS proteins are able to deactivate G protein subunits of the Gi alpha, Go alpha and Gq alpha subtypes. They drive G proteins into their inactive GDP-bound forms. Regulator of G protein

signaling 4 belongs to this family. All RGS proteins share a conserved 120-amino acid

sequence termed the RGS domain. Regulator of G protein signaling 4 protein is 37% identical to RGS1 and 97% identical to rat Rgs4. This protein negatively regulate signaling upstream or at the level of the heterotrimeric G protein and is localized in the cytoplasm. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2008]

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="mailto:custom shRNA service">custom shRNA service</a>.





# 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).