

## Product datasheet for **TR516081**

### Rasgrp1 Mouse shRNA Plasmid (Locus ID 19419)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Rasgrp1 Mouse shRNA Plasmid (Locus ID 19419)
Locus ID:	19419
Synonyms:	Rasgrp
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Rasgrp1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 19419). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC057120</a> , <a href="#">BC057341</a> , <a href="#">NM_011246</a> , <a href="#">NM_011246.1</a> , <a href="#">NM_011246.2</a> , <a href="#">NM_011246.3</a>
UniProt ID:	<a href="#">Q9Z1S3</a>
Summary:	Functions as a calcium- and diacylglycerol (DAG)-regulated nucleotide exchange factor specifically activating Ras through the exchange of bound GDP for GTP. Activates the Erk/MAP kinase cascade. Regulates T-cell/B-cell development, homeostasis and differentiation by coupling T-lymphocyte/B-lymphocyte antigen receptors to Ras. Regulates NK cell cytotoxicity and ITAM-dependent cytokine production by activation of Ras-mediated ERK and JNK pathways (By similarity). Functions in mast cell degranulation and cytokine secretion, regulating FcERI-evoked allergic responses (PubMed:17190838). May also function in differentiation of other cell types. Proto-oncogene, which promotes T-cell lymphomagenesis when its expression is deregulated (PubMed:15829980, PubMed:17210708).[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).