

Product datasheet for TR511295

Rtel1 Mouse shRNA Plasmid (Locus ID 269400)

Product data:

Product Type: shRNA Plasmids

Product Name: Rtel1 Mouse shRNA Plasmid (Locus ID 269400)

Locus ID: 269400

Synonyms: Al451565; AW540478; Rtel

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Rtel1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

269400). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC105578</u>, <u>NM 001001882</u>, <u>NM 001166665</u>, <u>NM 001166666</u>, <u>NM 001166667</u>, <u>NM 001166668</u>,

NR 030710, NM 001166665.1, NM 001001882.1, NM 001001882.2, NM 001001882.3, NM 001166666.1, NM 001166667.1, NM 001166668.1, BC144977, BC031201, BC057352,

BC144978, BC145658, NM 001363071

UniProt ID: Q0VGM9

Summary: ATP-dependent DNA helicase implicated in telomere-length regulation, DNA repair and the

maintenance of genomic stability. Acts as an anti-recombinase to counteract toxic

recombination and limit crossover during meiosis. Regulates meiotic recombination and crossover homeostasis by physically dissociating strand invasion events and thereby promotes noncrossover repair by meiotic synthesis dependent strand annealing (SDSA) as well as disassembly of D loop recombination intermediates. Also disassembles T loops and prevents telomere fragility by counteracting telomeric G4-DNA structures, which together

ensure the dynamics and stability of the telomere.[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 <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).