

Product datasheet for **TR519620**

Arhgef5 Mouse shRNA Plasmid (Locus ID 54324)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Arhgef5 Mouse shRNA Plasmid (Locus ID 54324)
Locus ID:	54324
Synonyms:	2210412D05Rik; AA717842; AW495314; Tim1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Arhgef5 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 54324). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_133674 , NM_133674.1 , BC006829 , BC025127 , BC038143
UniProt ID:	E9Q7D5
Summary:	Guanine nucleotide exchange factor which activates Rho GTPases (PubMed:19713215, PubMed:21525037). Strongly activates RHOA (PubMed:19713215, PubMed:21525037). Also strongly activates RHOB, weakly activates RHOC and RHOG and shows no effect on RHOD, RHOV, RHOQ or RAC1 (PubMed:19713215). Involved in regulation of cell shape and actin cytoskeletal organization (PubMed:21525037). Plays a role in actin organization by generating a loss of actin stress fibers and the formation of membrane ruffles and filopodia (By similarity). Required for SRC-induced podosome formation (PubMed:21525037). Involved in positive regulation of immature dendritic cell migration (PubMed:19713215). [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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



[View online »](#)

**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).