

## **Product datasheet for TL515569**

## OriGene Technologies, Inc.

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## **Arhgef18 Mouse shRNA Plasmid (Locus ID 102098)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Arhgef18 Mouse shRNA Plasmid (Locus ID 102098)

**Locus ID:** 102098

**Synonyms:** Al467246; D030053O22Rik

**Vector:** pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Arhgef18 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

102098). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

**RefSeq:** BC060639, NM 133962, NM 133962.2, NM 133962.3, BC009156, BC034512, BC091746,

BM216300, BM935742, NM 001370668

UniProt ID: O6P9R4

Summary: Acts as guanine nucleotide exchange factor (GEF) for RhoA GTPases. May play a role in actin

cytoskeleton reorganization in different tissues since its activation induces formation of actin stress fibers. Also acts as a GEF for RAC1, inducing production of reactive oxygen species (ROS). Does not act as a GEF for CDC42. The G protein beta-gamma (Gbetagamma) subunits of heterotrimeric G proteins act as activators, explaining the integrated effects of LPA and other G-protein coupled receptor agonists on actin stress fiber formation, cell shape change and ROS production. Required for EPB41L4B-mediated regulation of the circumferential

actomyosin belt in epithelial cells.[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>.







## 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).