

## Product datasheet for **TR501234**

### Arhgef1 Mouse shRNA Plasmid (Locus ID 16801)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Arhgef1 Mouse shRNA Plasmid (Locus ID 16801)
Locus ID:	16801
Synonyms:	Lbcl2; Lsc
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Arhgef1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 16801). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC012488</a> , <a href="#">NM_001130150</a> , <a href="#">NM_001130151</a> , <a href="#">NM_001130152</a> , <a href="#">NM_001130153</a> , <a href="#">NM_008488</a> , <a href="#">NM_001130152.1</a> , <a href="#">NM_001130150.1</a> , <a href="#">NM_001130151.1</a> , <a href="#">NM_001130153.1</a> , <a href="#">NM_008488.1</a> , <a href="#">NM_008488.2</a>
UniProt ID:	<a href="#">Q61210</a>
Summary:	Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) subunits. Acts as GTPase-activating protein (GAP) for GNA12 and GNA13, and as guanine nucleotide exchange factor (GEF) for RhoA GTPase. Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain. This GEF activity is inhibited by binding to activated GNA12. Mediates angiotensin-2-induced RhoA activation. Isoform 3 and isoform 4 do not homooligomerize and show an enhanced RhoGEF activity.[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).