

## Product datasheet for **TR500127**

### Arf1 Mouse shRNA Plasmid (Locus ID 11840)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Arf1 Mouse shRNA Plasmid (Locus ID 11840)
Locus ID:	11840
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Arf1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 11840). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC021403</a> , <a href="#">BC031986</a> , <a href="#">NM_001130408</a> , <a href="#">NM_007476</a> , <a href="#">NM_001130408.1</a> , <a href="#">NM_007476.1</a> , <a href="#">NM_007476.2</a> , <a href="#">NM_007476.3</a>
UniProt ID:	<a href="#">P84078</a>
Summary:	GTP-binding protein involved in protein trafficking among different compartments (PubMed:11950392). Modulates vesicle budding and uncoating within the Golgi complex. Deactivation induces the redistribution of the entire Golgi complex to the endoplasmic reticulum, suggesting a crucial role in protein trafficking. In its GTP-bound form, it triggers the association with coat proteins with the Golgi membrane. The hydrolysis of ARF1-bound GTP, which is mediated by ARFGAPs proteins, is required for dissociation of coat proteins from Golgi membranes and vesicles. The GTP-bound form interacts with PICK1 to limit PICK1-mediated inhibition of Arp2/3 complex activity; the function is linked to AMPA receptor (AMPA) trafficking, regulation of synaptic plasticity of excitatory synapses and spine shrinkage during long-term depression (LTD).[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).