

## Product datasheet for **TR505911**

### Abr Mouse shRNA Plasmid (Locus ID 109934)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Abr Mouse shRNA Plasmid (Locus ID 109934)
Locus ID:	109934
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Abr - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 109934). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC056385</a> , <a href="#">BC058708</a> , <a href="#">BC059064</a> , <a href="#">NM_001291186</a> , <a href="#">NM_001346670</a> , <a href="#">NM_198018</a> , <a href="#">NM_198894</a> , <a href="#">NM_198895</a> , <a href="#">NM_198018.1</a> , <a href="#">NM_198018.2</a> , <a href="#">NM_198894.1</a> , <a href="#">NM_198894.2</a> , <a href="#">NM_198895.1</a> , <a href="#">NM_198895.2</a> , <a href="#">NM_001291186.1</a> , <a href="#">BC043673</a> , <a href="#">NM_001363379</a>
UniProt ID:	<a href="#">Q5SSL4</a>
Summary:	Protein with a unique structure having two opposing regulatory activities toward small GTP-binding proteins. The C-terminus is a GTPase-activating protein domain which stimulates GTP hydrolysis by RAC1, RAC2 and CDC42. Accelerates the intrinsic rate of GTP hydrolysis of RAC1 or CDC42, leading to down-regulation of the active GTP-bound form. The central Dbl homology (DH) domain functions as guanine nucleotide exchange factor (GEF) that modulates the GTPases CDC42, RHOA and RAC1. Promotes the conversion of CDC42, RHOA and RAC1 from the GDP-bound to the GTP-bound form (By similarity). Functions as an important negative regulator of neuronal RAC1 activity (PubMed:20962234). Regulates macrophage functions such as CSF-1 directed motility and phagocytosis through the modulation of RAC1 activity (PubMed:17116687).[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).