

## Product datasheet for **TR503804**

### Tbc1d7 Mouse shRNA Plasmid (Locus ID 67046)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Tbc1d7 Mouse shRNA Plasmid (Locus ID 67046)
Locus ID:	67046
Synonyms:	2610009C09Rik
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Tbc1d7 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 67046). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC125307</a> , <a href="#">BC125309</a> , <a href="#">NM_001252639</a> , <a href="#">NM_001252640</a> , <a href="#">NM_025935</a> , <a href="#">NM_025935.1</a> , <a href="#">NM_025935.2</a> , <a href="#">NM_025935.3</a> , <a href="#">NM_001252640.1</a> , <a href="#">NM_001252639.1</a> , <a href="#">BC145156</a> , <a href="#">BC145157</a>
UniProt ID:	<a href="#">Q9D0K0</a>
Summary:	Component of the TSC-TBC complex, that contains TBC1D7 in addition to the TSC1-TSC2 complex and consists of the functional complex possessing GTPase-activating protein (GAP) activity toward RHEB in response to alterations in specific cellular growth conditions. The small GTPase RHEB is a direct activator of the protein kinase activity of mTORC1 and the TSC-TBC complex acts as a negative regulator of mTORC1 signaling cascade by acting as a GAP for RHEB. Participates in the proper sensing of growth factors and glucose, but not amino acids, by mTORC1. It is unclear whether TBC1D7 acts as a GTPase-activating protein and additional studies are required to answer this question.[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).