

## Product datasheet for **TR512429**

### Wdr4 Mouse shRNA Plasmid (Locus ID 57773)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Wdr4 Mouse shRNA Plasmid (Locus ID 57773)
Locus ID:	57773
Synonyms:	AI415180; AI448349; D530049K22Rik; Wh
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Wdr4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 57773). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC039272</a> , <a href="#">NM_021322</a> , <a href="#">NM_021322.1</a> , <a href="#">NM_021322.2</a>
UniProt ID:	<a href="#">Q9EP82</a>
Summary:	Non-catalytic component of a methyltransferase complex required for the formation of N(7)-methylguanine in a subset of RNA species, such as tRNAs, mRNAs and microRNAs (miRNAs) (PubMed:29983320). In the methyltransferase complex, it is required to stabilize and induce conformational changes of the catalytic subunit (By similarity). Required for the formation of N(7)-methylguanine at position 46 (m7G46) in tRNA (PubMed:29983320). Also required for the formation of N(7)-methylguanine at internal sites in a subset of mRNAs (By similarity). Also required for methylation of a specific subset of miRNAs, such as let-7 (By similarity). Acts as a regulator of embryonic stem cell self-renewal and differentiation (PubMed:29983320). Independently of METTL1, also plays a role in genome stability: localizes at the DNA replication site and regulates endonucleolytic activities of FEN1 (PubMed:29574139). [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).