

Product datasheet for TR504777

Rspo3 Mouse shRNA Plasmid (Locus ID 72780)

Product data:

OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Rspo3 Mouse shRNA Plasmid (Locus ID 72780)
Locus ID:	72780
Synonyms:	2810459H04Rik; AW742308; Cristin1; Thsd2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Rspo3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 72780). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC103794, NM 028351, NM 028351.1, NM 028351.2, NM 028351.3, BC145929, BC145931</u>
UniProt ID:	<u>Q2TJ95</u>
Summary:	Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors, which acts as a key regulator of angiogenesis (PubMed:16543246, PubMed:21693646, PubMed:26766444). Upon binding to LGR4-6 (LGR4, LGR5 or LGR6), LGR4-6 associate with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. Also regulates the canonical Wnt/beta-catenin-dependent pathway and non-canonical Wnt signaling by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. Acts as a ligand for frizzled FZD8 and LRP6. May negatively regulate the TGF-beta pathway (PubMed:16543246, PubMed:21693646). Acts as a key regulator of angiogenesis by controlling vascular stability and pruning: acts by activating the non-canonical Wnt signaling pathway in endothelial cells (PubMed:26766444, PubMed:16543246, PubMed:21693646). Can also amplify Wnt signaling pathway independently of LGR4-6 receptors, possibly by acting as

a direct antagonistic ligand to RNF43 and ZNRF3 (By similarity).[UniProtKB/Swiss-Prot



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Function]

	Rspo3 Mouse shRNA Plasmid (Locus ID 72780) – TR504777
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 <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .
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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

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