

Product datasheet for **TF711624**

Vegfa Rat shRNA Plasmid (Locus ID 83785)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Vegfa Rat shRNA Plasmid (Locus ID 83785)
Locus ID:	83785
Synonyms:	Vegf; VEGF-A; VEGF111; VEGF164; VPF
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Vegfa - Rat, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 83785). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	NM_001110333 , NM_001110334 , NM_001110335 , NM_001110336 , NM_001287107 , NM_001287108 , NM_001287110 , NM_001287111 , NM_001287112 , NM_001287113 , NM_001287114 , NM_031836 , NR_105011 , NM_001110336.1 , NM_031836.1 , NM_031836.2 , NM_031836.3 , NM_001110333.1 , NM_001110333.2 , NM_001110334.1 , NM_001110334.2 , NM_001110335.1 , NM_001287114.1 , NM_001287110.1 , NM_001287113.1 , NM_001287112.1 , NM_001287108.1 , NM_001287107.1 , NM_001287111.1 , BC168708
UniProt ID:	P16612



[View online »](#)

Summary:	<p>This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. There is also evidence for alternative translation initiation from upstream non-AUG (CUG) codons resulting in additional isoforms. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is antiangiogenic. Expression of some isoforms derived from the AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site. [provided by RefSeq, Nov 2015]</p>
shRNA Design:	<p>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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.</p>
Performance Guaranteed:	<p>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.</p> <p>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).</p>