

## Product datasheet for **MC209634**

### **Vegfa (NM\_001110267) Mouse Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Vegfa (NM_001110267) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Vegfa
Synonyms:	V; Veg; Vegf; VEGF12; VEGF16; VEGF18; Vpf
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC209634 representing NM_001110267 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGGAGCCCCGGGGTGTCCCATAGGGGTATGGCTGGCTGGGTCACTAACCCTGTGATCTGCTCCC  
TCCCTCTACAGATCATGCGGATCAAACCTACCAAAGCCAGCACATAGGAGAGATGAGCTTCCTACAGCA  
CAGCAGATGTGAATGCAGACCAAAGAAAGACAGAACAAAGCCAGAAAATCACTGTGAGCCTTGTTTCAGAG  
CGGAGAAAGCATTGTGTTGTCCAAGATCCGCAGACGTGTAATGTTCTGCAAAAACACAGACTCGCGTT  
GCAAGGCGAGGCAGCTTGAGTTAAACGAACGTACTTGCAGATGTGACAAGCCAAGGCGG**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: [https://cdn.origene.com/chromatograms/ja2371\\_e01.zip](https://cdn.origene.com/chromatograms/ja2371_e01.zip)

Restriction Sites: SgfI-MluI

ACCN: NM\_001110267

Insert Size: 342 bp



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<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p>
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001110267.1</a> , <a href="#">NP_001103737.1</a>
<b>RefSeq Size:</b>	2785 bp
<b>RefSeq ORF:</b>	342 bp
<b>Locus ID:</b>	22339
<b>UniProt ID:</b>	<a href="#">Q00731</a>
<b>Cytogenetics:</b>	17 22.79 cM

**Gene Summary:**

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]

Transcript Variant: This variant (5) differs in the 5' UTR and 5' coding region and also lacks an in-frame, internal coding exon, compared to variant 1. The resulting isoform (5) has a distinct and shorter N-terminus and also lacks an internal segment, compared to isoform 1. This variant has transcript support, but the protein is predicted.