

# **Product datasheet for MR227115**

## Vegfa (NM 001110268) Mouse Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Vegfa (NM\_001110268) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Vegfa

Synonyms: V; Veg; Vegf; VEGF12; VEGF16; VEGF18; Vpf

**Vector:** pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >MR227115 representing NM\_001110268
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227115 representing NM\_001110268

Red=Cloning site Green=Tags(s)

MAGAPGCPIGVWLAGSLTTVICSLPLQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTKPEKCDKPRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

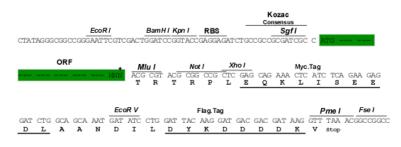
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



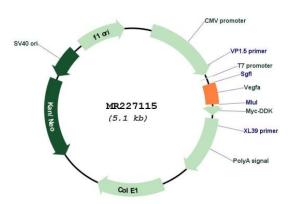
## **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

### Plasmid Map:



**ACCN:** NM\_001110268

ORF Size: 207 bp

#### Vegfa (NM\_001110268) Mouse Tagged ORF Clone - MR227115

**OTI Disclaimer:** 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. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** 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).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

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.

RefSeq: <u>NM 001110268.1</u>, <u>NP 001103738.1</u>

 RefSeq Size:
 2653 bp

 RefSeq ORF:
 210 bp

 Locus ID:
 22339

 UniProt ID:
 Q00731

Cytogenetics: 17 22.79 cM

**MW:** 8.2 kDa

**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]