

Product datasheet for **MG227112**

Vegfa (NM_001110267) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Vegfa (NM_001110267) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Vegfa
Synonyms: V; Veg; Vegf; VEGF12; VEGF16; VEGF18; Vpf
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG227112 representing NM_001110267
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGGAGCCCCGGGGTGTCCATAGGGGTATGGCTGGCTGGGTCCTAACCCTGTGATCTGCTCCC
TCCCTCTACAGATCATGCGGATCAAACCTACCAAAGCCAGCACATAGGAGAGATGAGCTTCTACAGCA
CAGCAGATGTGAATGCAGACCAAAGAAAGACAGAAACAAAGCCAGAAAATCACTGTGAGCCTTGTTTCAGAG
CGGAGAAAGCATTGTTTGTCCAAGATCCGACGACGTGTAATGTTCTGCAAAAACACAGACTCGCGTT
GCAAGGCGAGGCAGCTTGAGTTAAACGAACGTAAGTGCAGATGTGACAAGCCAAGGCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG227112 representing NM_001110267
Red=Cloning site Green=Tags(s)
MAGAPGCPIGVWLAGSLTTVICSLPLQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTPENHCEPCSE
RRKHLFVQDPQTCKCCKNTDSRCKARQLELNERTCRCDKPRR

TRTRPLE - GFP Tag - V

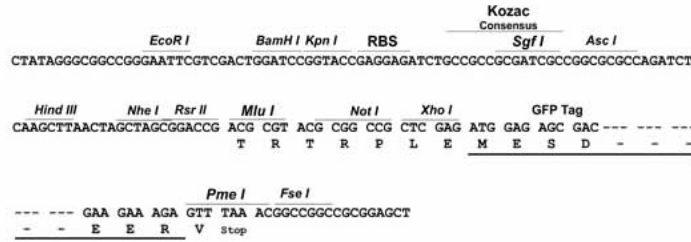
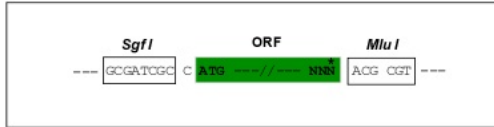
Restriction Sites: Sgfl-MluI



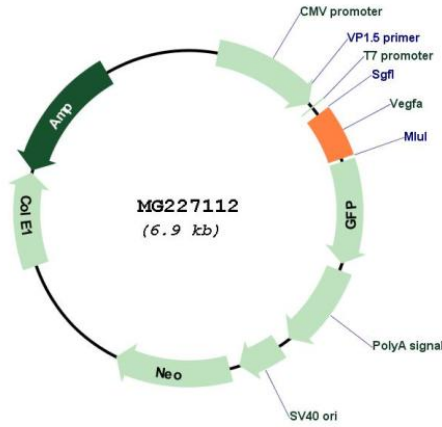
[View online »](#)

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001110267

ORF Size: 339 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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: [NM_001110267.1](#), [NP_001103737.1](#)

RefSeq Size: 2785 bp

RefSeq ORF: 342 bp

Locus ID: 22339

UniProt ID: [Q00731](#)

Cytogenetics: 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]