

Product datasheet for RC202426

VEGFB (NM_003377) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: VEGFB (NM_003377) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: VEGFB
Synonyms: VEGFL; VRF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202426 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCCCTCTGCTCCGCCGCTGCTGCTCGCCGACTCCTGCAGCTGGCCCCGCCAGGCCCTGTCT
 CCCAGCCTGATGCCCTGGCCACCAGAGAAAGTGGTGCATGGATAGATGTGTATACTCGCGCTACCTG
 CCAGCCCCGGGAGGTGGTGGTGCCTTGACTGTGGAGCTCATGGGCACCGTGGCCAAACAGCTGGTGCC
 AGCTGCGTGACTGTGCAGCGCTGTGGTGGCTGCTGCCGACGATGGCCTGGAGTGTGTGCCACTGGGC
 AGCACCAAGTCCGGATGCAGATCCTCATGATCCGGTACCCGAGCAGTCAGCTGGGGGAGATGTCCCTGGA
 AGAACACAGCCAGTGTGAATGCAGACCTAAAAAAAGGACAGTGTGTGAAGCCAGACAGGGCTGCCACT
 CCCCACCACCGTCCCCAGCCCCGTTCTGTTCCGGGCTGGGACTCTGCCCCGGAGCACCTCCCCAGCTG
 ACATCACCCATCCCACTCCAGCCCCAGGCCCTCTGCCACGCTGCACCCAGCACCCAGCGCCCTGAC
 CCCCAGACTGCCGCTGCCGCTGCCGACGCCGACGCTTCTCCGTTGCCAAGGGCGGGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202426 protein sequence
 Red=Cloning site Green=Tags(s)

MSPLLRLLLLAALLQLAPAQAPVSPDAPGHQRKVVSWIDVYTRATCQPREVVVPLTVELMGTVAKQLVP
 SCVTVQRCGGCCPDDGLECVPTGQHVRMQILMIRYPSSQLGEMSL EEHSQCCECRPKKDSAVKPDRAAT
 PHHRPQPRSVPGWDSAPGAPSPADITHPTAPGPSAHAAPSTTSALTPGAAAAADAAASSVAKGGA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6076_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003377

ORF Size: 621 bp

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

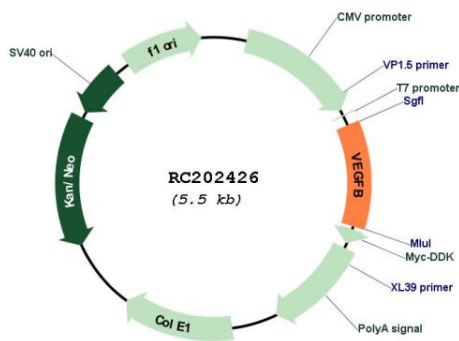
RefSeq: [NM_003377.5](#)

RefSeq Size: 1822 bp

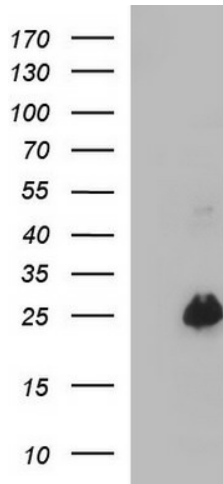
RefSeq ORF: 624 bp
Locus ID: 7423
UniProt ID: [P49765](#)
Cytogenetics: 11q13.1
Domains: PDGF
Protein Families: Druggable Genome, Secreted Protein
Protein Pathways: Bladder cancer, Cytokine-cytokine receptor interaction, Focal adhesion, mTOR signaling pathway, Pancreatic cancer, Pathways in cancer, Renal cell carcinoma
MW: 21.6 kDa

Gene Summary: This gene encodes a member of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial growth factor) family. The VEGF family members regulate the formation of blood vessels and are involved in endothelial cell physiology. This member is a ligand for VEGFR-1 (vascular endothelial growth factor receptor 1) and NRP-1 (neuropilin-1). Studies in mice showed that this gene was co-expressed with nuclear-encoded mitochondrial genes and the encoded protein specifically controlled endothelial uptake of fatty acids. Alternatively spliced transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Sep 2011]

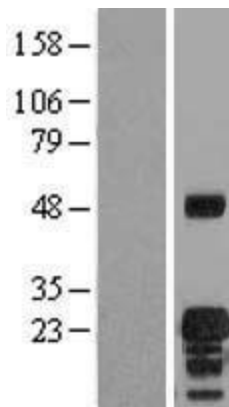
Product images:



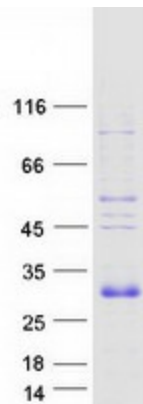
Circular map for RC202426



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY VEGFB (Cat# RC202426, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-VEGFB (Cat# [TA507205]). Positive lysates [LY418732] (100ug) and [LC418732] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418732]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202426 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified VEGFB protein (Cat# [TP302426]). The protein was produced from HEK293T cells transfected with VEGFB cDNA clone (Cat# RC202426) using MegaTran 2.0 (Cat# [TT210002]).