

## Specifications:

Gene:	hVEGFR2
Accession:	AAC16450
Insert size:	4084bp
Concentration:	10µg at 0.2µg/µL

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

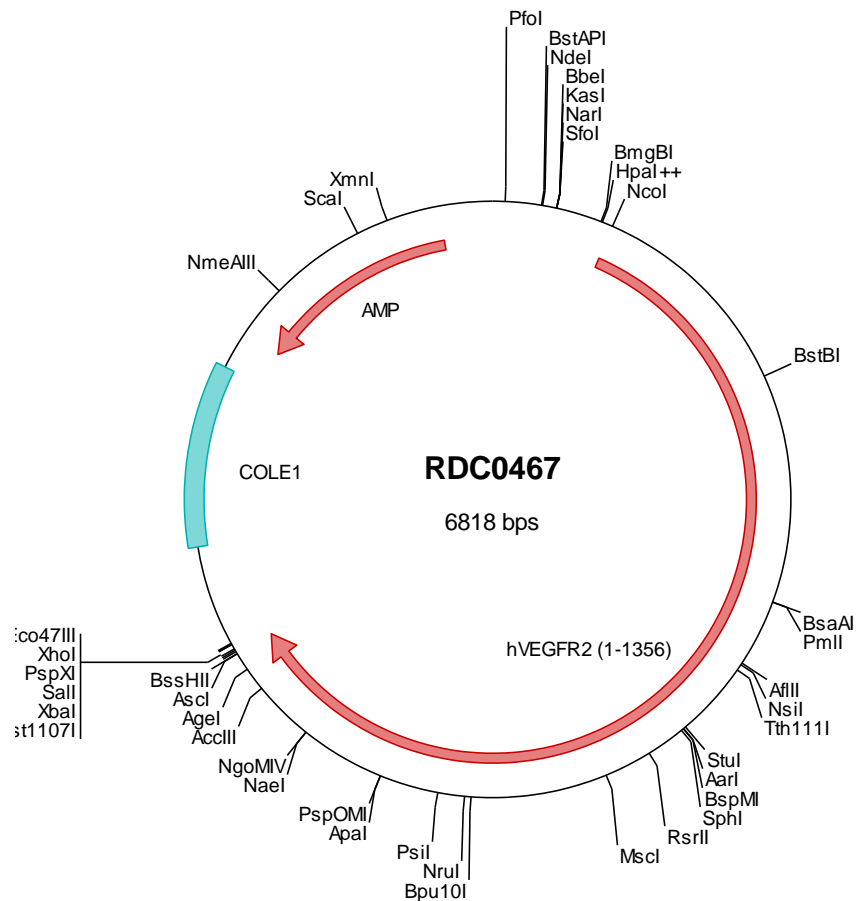
## hVEGFR2/KDR/Flk-1 cDNA Plasmid

**KDR kinase insert domain receptor (a type III receptor tyrosine kinase)**  
[ *Homo sapiens* ]

**Also known as:** FLK1; CD309; VEGFR

### Summary:

Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. VEGFR2 is one of the two receptors for VEGF. This receptor is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signaling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3 and T-cell protein tyrosine phosphatase.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS



## > RDC0467 Plasmid DNA Sequence

```
1 tcgcgcggtt cggatgatgac ggtgaaaacc tctgacacat gcagctcccg gagacgggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101 tcagggcgcg tcagcgggtg ttggcgggtg tccggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgcc accatattgcy gttgtaaata
201 ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctcgcg aactgttggg aagggcgatc ggtcggggcc tcttcgctat
301 taacggcagct ggcgaaaggg ggatgtgctg caaggcgatt aagtgggta acgcccgggt tttccagctc acgacgttgt aaaacgacgg ccagtgaatt
401 ggagacgtgt taacaagctt ggatccgata tctgtagcgc ggccgcacc atggaaagca agggtgctct ggccgtcgcc ctgtggctct cgctggagac
501 cgggtgccc tcgttgggtt tgccatggtt ttctcttgat ctgcccaggc tcagcataca aaaagacata cttacaatta aggctaatac aactctca
601 attacttgca ggggacagag ggaottggac tggtttggc ccaaataca gagtgccagt gagcaagg tgagggtgac tgagtgcagc gattggcctc
701 tctgtaagac actcaacatt ccaaaagtga tcggaaatga cactggagcc tacaaatgct ctacccggga aactgacctg gcctcggta tttatgtcta
801 tgttcaagat tcacagctct cattttattgc ttctgttagt gaccaacatg gagtcgtgta cattactgag aaaaaaaaca aaactgtggt gattccatgt
901 ctccgggtcca tttcaaatct caacgtgtca ctttgtgcaa gatacccaga aaagagattt gttccctgat gtaacagaa ttcctgggac agcaagaagg
1001 gctttactat tcccagctac atgatcagct atgctggcat ggtctctctg gaagcaaaaa ttaatgatga aagttaccag tctattatgt acatagttgt
1101 cgtttgatgg tatagcaatt atgatgtggt ctcgaagcgg ttcaatggaa tggtggagaa agcttctct tggtggagaa aagcttctct agcaagaact
1201 gaactaaatg tggggatgta cttcaactgg gaataccctt cttogaagca tcagcataag aaacttgtaa accgagacct aaaaaccocg ctcgggagtg
1301 agatgaagaa atttttgagc accttaacta tagatgggtg aaaccggagt gaccaaggat gttacacctg tgacagatcc agtgggctga tgaccaagaa
1401 gaacagcaca tttgcaggg tcacttggta acottttggt gcttttgtaa gtggcatgga atctctggtg gaagccacgg tgggggagcg tgtaagaa
1501 cctcgggaag accttgggta cccaccccca gaaataaaa ggtataaaaa tggaataacc cttgagtcca atcacacaat taaagcgggg catgtactga
1601 cgattatgca agttagtgaa agagacacag gaaattacac tgctcatcct accaatccca tttcaaggga gaagcagagc catgtggtct ctctggttgt
1701 gttgtccca cccagattg gtgagaaatc tctaatctct cctgtgagct actaccagct cggcaccact caaacgctga catgtacggt gtatgacct
1801 cctccccgcg atcacatcca ctggatttgg cagtgggagg aagagtgcgc caacgagccc agccaagctg tctcagtgac aaaccatc ccttctgaag
1901 aatggagaag tggtggaggc ttccagggag gaaataaaa tgaagttaat aaaaatcaat ttgctcta tgaagaaaa aacaaaactg taagtacctg
2001 gtttatccaa tggtcaaatg gtcaaaatgt gtcaaaatgt gaagcggtoa acaagctcgg gagaggagag agggtgactc ccttccactg gaccaggggt
2101 cctgaaatga ctttgcaacc tgacatgcag cccactgagc aggagagcgt gtctttgtgg tgcaactgca acagatctac gtttgagaac ctcacatggt
2201 caaagcttgg cccacagctc ctgccaatcc atgtgggaga gttgcccaca ccctgttgc agaacttgg tactcttgg aaatgaa ccacctgtt
2301 ctctaatagc acaaatgaca ttttgatcat ggagctttag aatgctatcc tgccaggaca aggagactat gtctgcctg ctcaagacag gaagacaa
2401 aaaagacatt gcgtggctcag gcagctcaca gtcttagagc gtgtggcacc ccagctcaca ggaacactgg agaaatcagc gacaagtatt ggggaaagca
2501 togaagtctc atgcaaggca ctctgggaatc ccoctccaca gatcatgtgg tttaaagata atgagacct tgtagaagc ctgagcatt tattgaagga
2601 tgggaaccgg aacctcaata tcgcagagtg gaggaaggag gacgaaggct ctacacctg ccagcactgc agtgctctg ctgtgcaaaa atttgaggga
2701 tttttcaata tagaaggtgc ccaggaaaag acgaacttgg aaatcaat tctagtaggc acggcgggta ttgccaatgt cttctgcta cttctgtca
2801 tcaatcctag gacctttag cgggccaatg gagggaaact gaagacagc tactgtcca tgctcatgga tccagatgaa ctccacttg atgaacctg
2901 tcatacagc cccttagatg ccagcaaatg ggaattcccc agagacagca tgcaactagg taagctctt gacccttct ctcttggcca agtgatgaa
3001 gcagatgctc ttggaattga caagacagca acttgcagga cagttagcagt caaaatgttg aaagaaggag caacacacag tgagcatoga gctctcagtg
3101 ctgaaactca gtctcctact acaattggtc acoatctcaa tgtggtcaac ctcttagtgc ctgtaccaa gccagaggg ccactcatg tctatgtga
3201 attctgcaaa tttggaaacc tgtocactta ctgtagggag aagaaataag aatttgtccc ctacaagacc aaaggggacc gattccgtca agggaaagac
3301 taacttggag caatccccgt ggaatctgaa cgggccttag acagactcac ccagttagcag agctcagcca gctctggatt cggtggagga aagtcacctca
3401 gtgatgtaga agaagaggaa gctcctcaag atctgtataa ggaactcctg caacttggag atctcatctg ttacagcttc caagtgcta gggcatgga
3501 gttcttggca tcgaagaagt gtaaccagag ggactctggc gcagcaaaaa tcctcttate ggagaagaa gtggttaaaa tctgtcaact tggtctggcc
3601 cgggatattt ataaagatc agattatgct agaaaaggag atgtctgctc ccctttgaaa tggttgccc cagaacaact ttttgacaga gtgtacacaa
3701 tccagatgaa gcctgtgctc tttgggtgtt tgctgtggga aatattttcc ttaggtgtct ctccaatgct ctccaataag tggggtaag aatttgtag
3801 gcgattgaaa gaggaagact gaaatgaggg ccctgattat actacaccag aaatgtacca gacctgtctg gacctgtggc acggtagacc cagtcagaga
3901 cccacgtttt ccagattggt ggaactctct ggaaatctct tcgaagctaa tgctcagcag gatggcaaa actacattgt tcttccgata tcagagactt
4001 tggacatgga agaggattct tgactctctc ggactctctc actctaccct tgctatggag aggaggaagt atgtgacccc aaatctcaat atgacaacc
4101 agcaggaatc agtoagtatc tgacagaacag taagcgaag agccggcctg tgagtgtaaa aaactttgaa gatatccctg tagaagaacc agaagtaaaa
4201 gtaatccagc atgacaacca gcagggcagct ggtatggctc ttgctccaga agagctgaaa actttggaag acagaaccaa attatctcca ctctttgggt
4301 gaaatggctc cagcaaaaag agggagctct tggtcatgga aggtccaacc cagacaagcg gctaccagct cggtatcac ctccgatgaca cagcaaccac
4401 cgtgtactcc agtgaggaa cagaactttt aaagctgata gagattggag tgcaaacccg tagcacagcc cagattctcc agcctgactc ggggaccaca
4501 ctgagctctc ctcctgttta aaggcgcgcc agtatactct agagtgcaca cccggggaa tctctgagcg ctcgtctcta gcttggcgta atcatggcta
4601 tagctgtttc ctgtgtgaaa ttggttatccg ctcacaattc cacacaacct acgagccgga agcataaagt gtaaaagcctg gggtgcctaa tgagttagct
4701 aactcacatt aaattgcttg cgctcactgc ccgctttcca gtcgggaaac ctgtctgtgc agctgcatta atgaatcggc caacgcggcg ggagagggcg
4801 tttcgtgatt gggcgctctt ccgcttccct gctcactgac tcgctgcgct cggtcgttcg gctgcggcga gcggtatcag ctcactcaaa ggcggtaata
4901 cggttatcca cagaatcag ggataacgca ggaaaagaaca agccagcaca agggccagca aagggccagga accgttaaaa ggccgcgttg ctggcgtttt
5001 tccataggct ccgccccctc gacgagcctc acaaaaatcg acgtcgaagt cagaggtggc gaaacccgac aggactataa agataccag cgtttcccc
5101 tggaaagctc ctcgtgctct ctcctgttcc gacctgcgcg cttaccggat acctgtccgc ctttctccct tcgggaagcg tgccgctttc tcatagctca
5201 cgctgtaggt atctcagttc ggtgtaggtc gttctgctcca agctggcgtg tgtgcaagaa ccccccgttc agcccagacc ctgcgcctta tcgggttaact
5301 atcgtcttga gtccaacccg gtaagacacg acttatcgc actggcagca gccactggta acaggattag cagagcggag tatgtaggcg gtgctacaga
5401 gttcttgaag tggtggccta actacggcta cactagaaga acagtatttg gtatctgcgc tctgtgaa ccagttacct tcggaaaaag agttgttagc
5501 tcttgatccg gcaaacaaac caccgcgtgt agcgggtggt tttttggttg caagcagcag attacgcgca gaaaaaaag atctcaagaa gatcctttga
5601 tctttttctac gggtctgac gctcagtgga acgaaaactc acgttaagg attttggta tgagattatc aaaaaggatc ttcacctaga tccttttaa
5701 ttaaaaaatg agttttaaat caatctaaag tatatatgag taaaactggt ctgacagtta ccaatgctta atcagtgagg cacctatctc agcgatctgt
5801 ctatttcggt ctccatagct tgctgactc cccgctgtg agataactac gatacgggag ggcttaccat ctggccccag tgctgcaatg ataccggag
5901 acccagctc accggctcca gatttatcag caataaacca gccagccgga agggccgagc gcagaagtgg tctgcaact ttatccgct ccatccagtc
6001 tattaattgt tgccgggaag ctagagtaag tagttcggca gtttaatagtt tgcccaactg gttggccatt gctacaggca tcgtgtgctg acgctcgtc
6101 ttttgattgg ctccattcag ctccagttcc caacgatcaa ggcgagttac gatacccccc atggttgta aaaaagcgg tagctctctc gcctctccga
6201 tcgttgcag aagtaagttg gccgcagtg tatcactcat ggttatggca gactgcata attctctac tgctatgcca tcogtaagat gctttctgt
6301 gactgggtgag tactcaacca agtoattctg agaaatagtt atgcggcgac cgagtgtctc ttgcccggcg tcaatacggg ataataccgc gccacatgc
6401 agaactttaa aagtgctcat cattggaaaa cgttcttcgg ggcgaaactc ctcaagagct ttaccctgtg tgagatccag ttcgtatgaa cccactcgtg
6501 caccacaactg atcttcagca tcttttactt tcaccagctg ttctgggtga gcaaaaaacg gaaggcaaaa tgccgcaaaa aagggataaa ggggcacacg
6601 gaaatgttga atactcatac tcttctcttt toaatattat tgaagcattt atcagggtta ttgtctcatg agcggataca tatttgaatg tatttagaaa
6701 aataaacaaa taggggttcc gcgcacattt ccccgaaaa tgcccactga cgctcaagaa accattatta tcatgacatt aacctataaa aataggcgta
6801 tcacgagccc ctttgctc
```



## > RDC0467 Translated Insert Sequence

```
1 meskvllava lwlcvetraa svglpsvsld lprlsiqkdi ltikanttlq itcrgqrdd wlpwnqsgs egrvevtecs dglfckltli pkvigndtga
101 ykcfyretdl asviyvvyqd yrspfiasvs dqhgvyvite nknktvvipt lgsisnlvns lcarypekrf vpdgnriswd skkgftipsy misyagmvfc
201 eakindesyq simyivvvvg yriydvvlsp shgielsvge klvlnctart elnvgidfnw eypsskhqhk klvnrldktq sgsemkkfls tltidvtrsv
301 dqglytcaas sglmtkknst fvrvehkpfv afgsgmeslv eatvgervri pakylgyppp eikwykngip lesnhtikag hvltimevse rdtgnytivil
401 tnpiskekqs hvvslvvyvp pqigekslis pvdsyqygtt qtlctctvyai ppphhihwyw qleeeecanep sqavsvtnpy pceewrsved fgggnkievn
501 knqfaliegk nktvstlviq aanvsalykc eavnkvgrge rvisfhvtrg peitlqpdmq ptegesvslw ctadrstfen ltwyklgppq lpihvgelpt
601 pvcknldtlw klnatmfsns tndilimelk naslqdgqdy vclaqdrktt krhcvvrqtl vlervaptit gnlenqttsi gesievscta sgnpppqimw
701 fkdnetlved sgivlkdgnr nltirrvrke deglytcqac svlgcakvea ffiiegaqek tnleiiilvg taviamffwl llviilrtvk ranggelktg
801 ylsivmdpde lpldehcerl pydaskwefp rdrlklgkpl grgafgqvie adafgidkta tortvavkml kegathsehr almselkili highhlnvvn
901 llgactkpgg plmvivefck fgnlstylrs krnefvpykt kgarfrgqkd yvgaipvdlk rrlsitsstq ssassgfvee ksldsvveee apedlykdfi
1001 tlehlicysf qvakgmevla srkcihrdla arnillsekn vvkicdfgla rdiykdpdyv rkgdarlplk wmapetifdr vytiqsdvws fgvllweifs
1101 lgaspypgvk ideefcrllk egtrmrappy ttpemyqtml dcwhgepsqr ptfselvehl gnllqanaqq dgkdyivlpi setlsmoods gislptspvs
1201 cmeeeevcdp kfhydntagi sqylqnskrk srpvsvktfe dipleepevk vipddnqtds gmvlaseeik tledrtklsp sfggmvpvskv resvasegsn
1301 qtsgyqsgyh sddtdttvys seeaellkli eigvqtgsta qilqpdsgtt lssppv
```