

# human VEGF-B bilgos (promoter-, cDNA- & intron sequences)

All annealing temperatures have been calculated with Primer Vision 0.5

f = forward, r = reverse

promoter sequence: Chilov et al. (numbering: 1st bp of XhoI recognition sequence = 1)

cDNA sequence: Olafsson et al. (numbering: A from initiation ATG = 5)

exon-intron boundaries and intron lengths: O'Riordan et al. (no numbering)

date: 17/04/97

ct cga gat ctg ttt gtt gto ttg gaa caa tac ggt tta gag gtg act ggc ggg tga cga  
 10 50

gaa cat atg cga gtt cac cta aga gaa aag ctg aat gag gca atg oot ett oot gac cat  
 70 110

ato tot tac tca gat aac tat aga att tat tgt cca gta aag ggt ata tta aaa aat cat  
 1 80 15 0 170

att aaa agt cat acc gtg aag ttg too agg gaa ato aag act taa cag tot cac tot gac  
 1 90 21 0 290

3548(50.4°C)

3547(55.1°C)

aat aat gaa cag ggg gat too cto aag ata gac tag gac atg acc cca cac tgg cag gta  
 1 50 27 0 290

gta gta cca gaa aag aac gca tgg aaa ato ttt acc tta tgo ttg agg tag gga cca ggc  
 3 10 33 0 350

taa agt gaa ggc cag acc taa aat tot ato taa aat aaa too acc ato gaa gaa aat atg  
 3 70 39 0 410

tgg tgt acc ggt ata gaa tgt ett tac tgg ato att gaa ata gta aga taa att cca ott  
 4 80 45 0 470

ttt acc ttg ttt tot ttt oot cca gtt agg got tga gac ott ogt cto tgg aga gtg act  
 4 90 51 0 530

3688(53.1°C)

3851(53.0°C)

gto aat tgg agc oot got tto tgg gtt tot ggc cag ggg ggt tgt gga tgo tta acc tgt  
 5 50 57 0 590

goc ttt cac agg acc ott oot tac ccc agc agt ggc cca gtg tgo ato cca cga cca ggc  
 6 10 63 0 650

ctc oot cto aag gaa cat ctg ttg aga cta gga gat goc tgg tga ctg ttg oot gac ctg  
 6 70 69 0 710

tgt oot gtg tat tto tga cca gag cca cto tca aag acc ctg goc agg agg aga gtt agg  
 7 80 75 0 770

3642-3778(55.0°C)

tto cag tgt agg tca got cag acc gat gga ggc cac aga ago aaa cat ggg aaa tca cag  
 7 90 81 0 830

3862(52.9°C)

aag tag gtt tat tac tca cag atc cct atc cca acc acc cag gtg ccc tot cct cca ggg  
8 50 87 0 890

cca acc gag gca tcc ttc agc agg agc gac aac ggc tag ggc agc ggc aag cag cca cca  
9 10 93 0 950

tcc gag cca acc cag gcc ccg aga tgg tgc ccc ggg ggc ccg gcc cct gag ggg ctc acc  
9 70 99 0 1 010

3831(66.9°C)

tgg atg ggg cct gca tgc gtt ccc gat tgg ctt cct tcc ctg gac ggc ccg ctc ccc cga  
10 80 105 0 1 070

aac gag ccg cca ata aag tga ttc gca gag ctc gtg tgc ggc tcc ctc ctt aag gcc cga  
10 90 111 0 1 130

cgc ccc ccg ccc cgg cct cgc cca ggg cag cgc ccc ggc ctc ccg gta gtg ggc gcc ggc  
11 50 117 0 1 190

3853(72.0°C)

gac tgg gga gcc cag cct cct ggg ccg tgc gtc ccc ttc ccc ctg ccg ccg ccg gag ggg  
12 10 123 0 1 250

3535(69.0°C)

gga ggg ggt gtr tgg agg agg ccg gcc ccg ccg aag gcc tag ccc ccc cac ccc gcc gcc  
12 70 129 0 1 310

ccg ccc ccg ccc cac ggg ccc ggt ggg gag cgc gtg tot ggg tca cat ccg cct gcc  
13 80 135 0 1 370

cgc cag ccc ggg ccc agc ccc ccg ccg ccc ccg ccg tcc ccg ccg ccg ctg ccc gcc gcc  
13 90 141 0 1 430

acc ggc cgc ccg ccc gcc ccg ctc ctc ccg ccg cct tag ctg cgc tgg ctg cgc tgc ctg  
14 50 147 0 1 490

ccc cca ggg ctc ggg agg ggg ccg ccg agg agc cgc ccc ccg cgc ccg gcc ccc gcc cgc  
15 10 153 0 1 550

cgc gcc ccg gcc cgc gcc atg ggg ctc tgc tgc cgc cgc ccc ccg cgc cgc ccg cct agg  
15 70 159 0 1 610

ggg atg ccg ggg ccc ccg ggg ggg gcc ccg ggg gg  
16 30 165 0

3389(75.7°C)  
 3949(73.2°C)  
 3309(73.2°C)  
 8828(67.0°C)  
 8829(67.6°C)

H S P L L R R L L L A A L L Q L A P A  
 CAGC ATG AGC OCT CTG CTC GGC CCC CTG CTC CTC GGC GCA CTC CTG CAG CTG GGC CCC GGC

10 19 28 37 46 55  
 2700(65.6°C) 8779(71.2°C)

8819(81.9°C intron, 67.4°C cDNA)  
 3359(74.2°C BamHI8ApaI-tail)  
 2842(68.7°C)

A P V S Q P D A P G H Q  
 CAGGtaagtggg...-564bp...ctctccacagGCC CCT CTC TCC CAG CCT GAT GGC OCT GGC CAC CAG

64 73 82 91 100  
 8823(67.1°C) 8901(63.6°C) 2789(68.7°C) 2841-6048(68.7°C) 61187(60.6°C)

R E Y intron 2 V S V I D V Y T R A  
 GGG AAA Ggtaataetta...318bp...ctgctccacagTTC TTC ACT CTC GAG CTC ATC GGC ACC CTC CCC AAA

103 112 121 130 139  
 3359(57.3°C)

T C Q P R I V V V P L T V E L H G T V A K  
 TGC TOC CAG CCC CCG CAG CTC CTC GTC CCC TTC ACT CTC GAG CTC ATC GGC ACC CTC CCC AAA

142 151 160 169 178 187 196 202  
 61189(63.9°C)

Q L V D S C V T V Q R C G C C P D D C L  
 CAG CTC CTC CCC AGC TCC CTC ACT CTC CAG CCG TCT CCT GGC TCC TGT CCT GAG GAT GGC CTC

205 214 223 232 241 250 259 265  
 2723(68.0°C) 2689(67.0°C)

E C Y P T G Q K Q V R M Q intron 3  
 GAG TGT GTC CCC ACT GGG CAG CAC CAA GTC CCG ATG CAGgtaactgggca...246bp...ctgagcagag

263 277 286 295 304  
 2643(66.4°C)

I L H I R T P S S Q L C E M S L E E H S Q  
 ATC CTC ATG ATC CCG TAC CCC ACC ACT CAG CTC CCG CAG ATG TCC CTC GAA GAA CAC ACC CAG

307 316 325 334 343 352 361 367  
 2680(65.3°C) 2753(57.0°C)

2709(63.1°C intron)  
 C E C R intron 4 P K K E D S A Y K  
 TGT GAA TCC AGgtagcagaca...-600bp...taactttccagA CCT AAA AAA AAG CAC ACT CCT CTC AAG

370 379 388 397 406  
 2701(61.3°C) 2831(61.9°C) 61160(60.5°C)

F D R intron 5 A A T P E N R P Q P  
 CCA GAC AAggtgagtctttt...184bp...tctctccctagG GCT GGC ACT CCG CAC CAG CAG CCG CCG CAG CCG  
 489 415 424 433 442 445

903a(81.2°C)

283a(53.7°C)

270a(70.0°C)

276a(70.0°C)

R S T P G T D S A P G A P S P A D I T H P  
 CGT TCT GGT CCG GGC TGG GAC TCT GCC CCG GGA GCA CCG TCC CCA GCT GAC ATC ACC CAT CCG  
 448 457 466 475 484 493 502 508

6119a(65.1°C)

exon 6A exon 6B

T P A P G T S A H A A P S T T S A L T P G  
 ACT CCA GGC CCA GGC CCG TCT GCG CAC GCT GCA CCG GCG ACC ACC GCG GCG CTA ACC CCG GGA  
 511 520 529 538 547 556 565 571

8119(71.6°C)

P A A A A A D A A A S S T A E G G A +  
 CCT GCG GCG GCG GCG GCG GAC GCG GCA GCT TCC TCC GTT GCG AAG GCG GCG GCT TAG ACC TCA  
 574 583 592 601 610 619 628 634

6122a(74.3°C)

ACC CAG ACA CCG GCA GGT GCG GGA AGC TGC GAA GGT GAC ACA TGG CTT TTC AGA CTC ACC AGG  
 637 646 655 664 673 682 691 697  
 3417(54.1°C) 6118a(67.6°C) 272a(65.2°C) 6120a(58.0°C)

GGG ACT TGC CTC AGA GGC TAT ATC CCA GTG GGG GAA CAA AGA GGA GCG TGG TAA AAA ACA GCG  
 700 709 718 727 736 745 754 760

167

F D S intron 5 P R P L C P R C T Q  
 CCA GAC AAggtgagtctttt...285bp...ccctctccagC CCG AAG CCG CTC TGC CCA CCG TGC ACC CAG  
 489 418 427 436 445

H H O R P J P R T C R C R C R R S F L R  
 CAC CAC CAG CAC CCG CCG CCG CCG ACC TGC CCG CCG CCG TGC CCA CCG CCG AGC TTC CTC CAG  
 448 457 466 475 484 493 502 508

8119(71.6°C)

C O G R G L E L N P D T C R intron 6  
 TGC CAA GGG CCG GGC TTA GAG CTC AAC CCA GAC ACC TGC AAggtgagggtc...280bp...ccctctccag  
 511 520 529 538 547

3417(54.1°C)

8889(63.1°C)

8889(57.6°C)

8889(64.1°C)

8889(64.1°C)

C E K L R R +  
 G TGC CCG AAG CTA CCA AAG TGA CAC ATG GCT TTT CAG ACT CAG CAG GGT GAC TTG OCT CAG AAG  
 553 562 571 580 589 598 607 613

272a(65.2°C)

6120a(58.0°C)