

## File S5

Annotated DNA sequence of the four plasmids used to generate transgenic *A. gambiae* lines expressing codon-optimized CSP (with and without Fasciclin gpi anchor, with Lipophorin (Lp) or Vitellogenin (Vg) promoter)

### pAttBRfB1CFP-Vg-OptCSPΔgpi:

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                     /note="ECFP (Clontech) "
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181  CGCTTCCGTG  TTTTGTCTAC  CCAGAAACGC  TGGTGAAAGT  AAAAGATGCT  GAAGATCAGT
241  TGGGTGCACG  AGTGGTTTAC  ATCGAAGTGG  ATCTCAACAG  CCGTAAGATC  CTGAGAGTT
301  TTCGCCCGGA  AGAACGTTTT  CCAATGATGA  GCACTTTTAA  AGTTCTGCTA  TGTGGCGCGG
361  TATTATCCCG  TATTGACGCC  GGGCAAAGAG  AACTCGGTCG  CCGCATACAC  TATTCTCAGA
421  ATGACTTGGT  TGAGTACTCA  CCAGTCACAG  AAAAGCATCT  TACGGATGGC  ATGACAGTAA
481  GAGAATTATG  CAGTGTCTGC  ATAACCATGA  GTGATAACAC  TCGCGCCAAC  TTACTTCTGA
541  CAACGATCGG  AGGACCGAAG  GAGCTAACCG  CTTTTTTTGA  CAACATGGGG  GNATCATGTA
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661  CACCACGATG  CCTGTAGCAA  TGGCAACAAC  GTTGCGCAAA  CTATTAACGT  GCGAACTACT
721  TACTCTAGCT  TCCCGGCAAC  AATTAATAGA  CTGGATGGAG  GCGGATAAAG  TTGAGGACC
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841  GCGTGGGTCT  CGCGGTATCA  TTGCAGCACT  GGGGCCAGAT  GGTAAAGCCT  CCCGTATCGT
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1381  AATCCTGTTA  CCAGTGGCTG  CTGCCAGTGG  CGATAAGTCG  TGTCTTACCG  GGTGGACTC
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1861  TGAGTAGACT  GATACCGCTC  GCCGAGCCG  AACGACCGAG  CGCAGCGAGT  CAGTGAGCGA
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2281 CCGCGTCGCA CCGTCCGTCG TCACCGTGAC CACCGCGCCC AGCGGTTTCC AGGGCGAGGG  
2341 CTTCCCGGTG CGCCGCGCGT TCGCCGGGAT CAACTACCGC CACCTCGACC CGTTCATCAT  
2401 GATGGACCAG ATGGGTGAGG TGGAGTACGC GCCCGGGGAG CCAAGGGCA CGCCCTGGCA  
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### pAttBRfB1GFP-Lp-OptCSP:

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### pAttBRfB1YFP-Vg-OptCSP:

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#### ORIGIN

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241 TGGGTGCACG  AGTGGGTTAC  ATCGAACTGG  ATCTCAACAG  CGGTAAGATC  CTTGAGAGTT
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### pAttBRfB1RFP-Lp-OptCSPΔgpi:

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2041 TGTGAGTTAG CTCACTCATT AGGCACCCCA GGCTTTACAC TTTATGCTTC CGCTCGTAT
2101 GTTGTGTGGA ATTGTGAGCG GATAACAATT TCACACAGGA AACAGCTATG ACCATGATTA
2161 CGCCAAGCTC GAAATTAACC CTCACTAAAG GGAACAAAAG CTGGCTAGAA CTAGTGTCCA
2221 CATGCCCGC GATGCCGCTG AGAACCCGCT GACGCTGCCC CGCGTATCCG CACCCCGCGA
2281 CGCCGTCGCA CGTCCCGTGC TCACCGTGAC CACCGCGCCC AGCGGTTTCG AGGGCGAGGG
2341 CTTCCCGGTG CGCCGCGCGT TCGCCGGGAT CAACTACCGC CACCTCGACC CGTTTATCAT
2401 GATGGACCG ATGGGTGAGG TGGAGTACCG GCCCGGGGAG CCCAAGGGCA CGCCCTGGCA
2461 CCCGCACCGC GGCTTCGAGA CCGTGACCTA CATCGTCGAC ACTAGTGgat catcaaacaa
2521 gtttGTACAA AAAAGCAGGC TGGTACCGGG CCCCCCGCTA GCCTCGACGG TATCGATAAG
2581 cTTGCGGGA AGACACATTC GAGATACGCT AAGTGATTGA GCGATTACGA TCTAGCAAAA
2641 CATACGTTCA GCTGTGAGAA TAATCATCCA TCTTCTGCA ATGAGCAGTT CATTCCCGAT
2701 TGAGGGATTT TATTCCCCGG GGGCCTTTTC AAACGGCTTA ATATAAGCAA TTAATAGTAT
2761 TTTTTCTTTC AGGTTAGTTT ACTGTAATGG TGTAAATGTC ATCTTACACC TCCGCTGAT
2821 AAGAGATTAC GAAGCTCAGT ATGATGAAAT AAATAAGATA AATTTATTTA AAAAAGAACA
2881 ATTGCTATGA GAGTGAATA CAACAGTGGC GTTCACAATA TTCGAAAAAC AATAAAATTA
2941 AAAAAAACA AAAAAACAT TCACAAACAT ATCAATCTGC TTTTATCGAC ACCGAACCTG
3001 TAGCCTCCCC AGTCTAACCG CGGTGGGGAC GTTTAATTGC CTTTGTCTC GCACCCGGTC
3061 AAACATACAC TTCGGACCTT GCTCCGAACC CCACTGTGAT CCCTAGCTCG TCATCATCAT
3121 TGCCGGCAGC ATGCTAAGCG TGCATTATTT TCACAACCTA CCGTAATGCT AGCGTGCCT
3181 AGCAACAAAC TCGCCCGCAG ACTCGTCACA GCACCGGTAC GATCGATCGT TTACCGTTCC
3241 CTTTCCCGAT CGGGTTGGCT GCGATATCCG TGTCCGGGTA GAAAACCTCC CCTTTTACAC
3301 ACACACTACT ACATACACAC AGAGCTGAAT AGCAACTTAC CTTATCTGTT CGTCATCGCT
3361 CGGGCGGATC TGGACGAATC TTCGCACCGA TAACCATGTG GATCTACGAC CTCCGCTTGG
3421 CTGTCTCTCT GCTCATGTGT ATGTCTGTGT GTGTGTGTAT GTGAGCTTCT TCCTCAAAT
3481 CCTCGATCT CGTGTGSCA ACAATCAAAC GTGCAAGTGC AACATTGCA CCCATTGAT
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3601 TACCGCAGAT CTACAGAGAA CTTCAATTGA GGTCTTTTCC ACCCCAGCC CTCAACCCGC
3661 AATCCGCGAG CCACTGGATC ATCAGCGAAA GAGAGAGAGA GCAGAGCAGA ACAGAGGTGA
3721 CCAACTGTGG TATCGCTTCC CGCGCGCCGG TGTGTGGTG TCCATTTCCG TGATCGCGAT
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4021 GTGAGTACG TGTGCCCCGA TCGGTAAGA GTGAACCGTC TTCTCTGAG TGTAGGAGAG
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4321 AGATCATCCA GCGCAGCGC AACTTGAATG AGCTGTGTTA TAATGAAGGA AACGATAACA
4381 AATTGTACCA TGTGTTGAAC AGCAAGAATG GTAAGATCTA TAATGAAAAC ACGGTCAACC
4441 GACTCTTGGC TGATGCTCCG GAAGGAAAGA AAAACGAGAA GAAAATGAG AAGATCGAGC

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4501 GGAATAACAA ATTGAAGCAG CCTCCTCCGC CGCCCAACCC CAACGATCCA CCTCCACCAA  
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