

Figure S1. Sequences of codon-optimized nLuc and iRFP genes.

nLuc

gctagccaccATGGTCTTCACACT**CGA**AGATTT**CG**TTGGGGACTGG**CG**ACAGACAG**CCGG** OG
.....T.....T.....A.....A.. CO

CTACAACCTGGACCAAGTCCTTGAACAGGGAGGTGTGTCCAGTTTGTTCAGAATCT**CGG** OG
.....A.. CO

GGTGT**CG**TAACT**CG**ATCCAAAGGATTGTCTGAG**CGGT**GAAAATGGGCTGAAGAT**CGA** OG
.....T.....C.....T.....A.. CO

CATCCATGTCATCATCC**CG**TATGAAGGTCTGAG**CGGCG**ACCAAATGGGCCAGAT**CGAAAA** OG
.....A.....T..G.....T..... CO

AATTTTTAAGGTGGTGTACCCTGTGGATGATCATCACTTTAAGGTGATCCTGCACTATGG OG
..... CO

CACACTGGTAAT**CGAC**CGGGGTT**CGCCGA**ACATGAT**CG**ACTATTT**CGGAC**CGCC**CG**TATGA OG
.....T..T.....A..C.....T.....T...A....C..... CO

AGGCAT**CGCCG**TGTT**CGAC**CGCAAAAAGATCACTGTAACAGGGACCCTGTGGAAC**CGG**CAA OG
.....A..A.....T..T.....T..... CO

CAAAATTAT**CGAC**CGAG**CGC**CTGATCAACCC**CGAC**CGGCTCCCTGCTGTT**CG**AGTAACCAT OG
.....A..T...A.A.....A..T.....A..... CO

CAAC**CG**GAGTGAC**CGG**CTGG**CGG**CTGTG**CGAAC**CGCATTCTGG**CG**TAA OG
...T.....A.....A.....T...A.G.....C... CO

iRFP

gctagccaccATGG**CGCG**TAAGGT**CG**ATCTCACCTCCTG**CG**AT**CGCG**AGCC**CG**ATCCACATCC OG
.....TA.A.....A.....T...A.A.....C..... CO

CCGGCAGCATT**CAGCCG**TG**CG**GGCTGCCTGCTGGCCTG**CG**AC**CGCG**CAGG**CG**GTG**CG**GAT**CACG** OG
.A.....A..T.....T..T..T.....T...A.....C CO

CGCATT**ACG**GAAAATG**CCGGCGCG**TTCTTTGGAC**CG**GAAACT**CCGGCG**GGT**CG**GTGAGCTACT OG
A.G.....T.....T..T..A.....A.A.....TA...T..... CO

CGCGATTACTT**CGGGCG**AGAC**CG**AAGCCCATG**CG**CTG**CG**CAAC**CG**CACTGG**CG**CAGTCCT**CCG** OG
T..T.....T..A.....T.....T...A.A..T.....T.....A. CO

ATCCAAAG**CG**AC**CGGGCG**CTGATCTT**CG**GT**TGGCGCG**AC**CG**GCCTGAC**CG**GC**CG**CACCTT**CG**AC OG
.....A...T..A.....T.....A.A..T.....A..A.....T... CO

ATCTCACTGCAT**CG**CCATGA**CG**GTACATCAATCAT**CG**AGTT**CG**AGCCTG**CGGGCG**GCCGAACA OG
.....A.....T.....T.....T.....A..T..T..... CO

GG**CG**ACAAT**CCG**CTG**CG**GGCTGAC**CGCG**GCAGATCAT**CGCGCG**CACCAAGA**ACTGAAGT****CGC** OG
...T.....A..A.....TA.....T..TA.A.....T. CO

T**CG**AAGAGATGG**CCG**CAC**CGGGT**G**CCCG**CTATCTGCAGG**CG**ATGCT**CG**GTATAC**CCGCG**TG OG
.A.....A..A.....TA.A.....T.....T.....A.A... CO

ATGTTGTAC**CG**CTT**CGCG**GAC**CG**AG**CG**GCT**CCGG**GATGGTGAT**CGGGCG**AGG**CGAAGCG**CAG**CGA** OG
.....A.G..T..A..T..T.....A.....A..T.....A..A...T.. CO

CCT**CG**AGAGCTTTCT**CG**GT**CAG**CACTTT**CCGGCG**T**CG**CTGGT**CCCG**CAGCAGG**CGCG**GCTAC OG
...A.....A.....A..T..A.....A.....TA..... CO

TGTA**CTTGAAGAA****CGCG**AT**CCGCG**TGGTCT**CGG**ATT**CGCGCG**GCATCAGCAG**CCGG**AT**CG**TG OG
.....T..T..A.A.....A.....AA.A.....A...T... CO

CC**CG**AGC**ACG**AC**CG**CCT**CCGGCGCGCG**CT**CG**ATCTGT**CG**TT**CGCG**CACCTG**CG**CAGCATCTC OG
..A.....T..T.....A..T..A..T..T.....C..T..A.....A..... CO

GCCCTGCCATCT**CG**AATTTCTG**CG**GAACATGGG**CG**TCAG**CG**CCT**CG**ATGT**CG**CTGT**CG**ATCA OG
.....A.....A.....T.....T.....T.....A.....A..... CO

TCATTGAC**CG**GC**ACG**CTATGGGGATTGATCATCTGTCATCATT**ACG**AG**CCGCG**TGCC**CG**TGCC**CG** OG
.....T.....A.....T.....AA...T.....T CO

ATGG**CG**CAG**CGCG**T**CGCG**GC**CG**AAATGTT**CG**CC**CG**ACTTCTTAT**CG**CTGCACTT**CACCGCG** OG
.....A..A.A..T..T..A.....T..A.....A.....T..T.. CO

CCACCACCA**ACG**CTAA OG
.....A.A... CO