Electronic Supplementary Material

Assembly of long DNA sequences using a new synthetic *Escherichia coli*–yeast shuttle vector

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Table S1. Primers used for PCR amplification of *pGF* vectors and fragments

Primer name	Sequences	nt
Primers used for amplification of pGF vectors		
XAF-1	GCTCGTAGATCGTCATGGTTTGTTTCTCACCTGGTAGTTCgcggccgcgatcctctagagtcgacctg	68
XAR-1	AAGCTTAGGTACTTCTGGTAACGGTTTACGAGTGACGACAgcggccgccgggtaccgagctcgaattc	68
XBF-1	CCTCCTGGTCGTACAGCAACACCAACTAGACGACTACCGCgcggccgcgatcctctagagtcgacctg	68
XBR-1	GTGACGGAGCGTCGTAGAGAACGGTAGCTCGTGACGGTTGgcggccgccgggtaccgagctcgaattc	68
XCF-1	AAAGCGAAGACTTGCCCGAACTCCCGTCACTTGAAGACACgcggccgcgatcctctagagtcgacctg	68
XCR-1	GCTGGCCGACCTGCTCGACGCTATCGAAGACGACGCACAGgcggccgccgggtaccgagctcgaattc	68
Primers used for amplification of fragments A1-A4, B1-B4, C1-C2		
AF1	GAACTACCAGGTGAGAAACAAACCATG	27
AR1	ACCATCGTTACAGGTTTTAACATCGG	26
AF2	TGACTTGGCACGGTGTACTAGGTCAC	26
AR2	GCTGCTACGTTTGTAGACCTAACCTATAAG	30
AF3	TCTGATAGCATCATCAAAGCCGTTAC	26
AR3	ACCTATGTTGTCTGGTCGGTCGTTT	25
AF4	CTTTGATGATGACAGCCGTAGGTTT	25
AR4	TGTCGTCACTCGTAAACCGTTACCAG	26
BF1	GCGGTAGTCGTCTAGTTGGTGTTG	24
BR1	CACAGTGGAACCAACAACTACTAGAAGC	28
BF2	GGTCACGTAAGCTTGAGATCACCTCT	26
BR2	GTACTTCGACAACGAAGATGTGCTACC	27
BF3	CTACTAAGTCATCTACATCCTGACCAGAAGC	31
BR3	GAAAAGCAAGCACAACGAGCTAAGC	25
BF4	ACAGCTTGTTGTCTTTTTCTTTCACGTATC	30
BR4	CAACCGTCACGAGCTACCGTTC	22
CF1	GTGTCTTCAAGTGACGGGAGTTCG	24
CR1	ATGCTTGTCGTAGACCCTGCTGTG	24
CF2	TCGTTGTCGTAACCACCTACGGTC	24
CR2	CTGTGCGTCGTCTTCGATAGCGTCGAG	27

Table S2. Primers designed to amplify the sequences across the adjacent DNA fragments

Primer name	Sequences	nt
FV	CCCAGGCTTTACACTTTATGCTTC	24
RA1	GCAACCGACACACAGCCTCTT	21
FA1	TACACGGGTGGGGTGTTAGTACC	23
RA2	CTTCTGCTTTTGAAAGACCTCCTCT	25
FA2	CTGGGTCGTACATGATAGCTGCTG	24
RA3	TGGTCACTTACAACGTATCATCCCT	25
FA3	CTTGTTCACCTCGTCTACTAACCG	24
RA4	AGTGCTACTAACTGGGTTGTCGATG	25
FA4	GTTCTACAGAAGGACGTGGTTGTGT	25
RB1	GTAACAACAGCTACACTGTGGCTG	24
FB1	CTGTGCTCGTTGTCGTTCTACTG	23
RB2	AGAAGGGTGAGATACAACGCTTTG	24
FB2	CACAGAGTTTCCACGAAGCCTC	22
RB3	CTTCAAGTAGTGCCTTACGACAACG	25
FB3	CCTTGTCGTTTACTGACGTTACCAC	25
RB4	GTTATCAAACGTGCGTCTTACCTCA	25
FB4	TTTTCCCAGAGTTTACGCACCTC	23
RC1	TAGTTCCTATCGGAAGCGACCAT	23
FC1	GAAGTTGTACACTTTGGCGGGAG	23
RC2	CTATCACTACAACCCAGTAGCCAACA	26
FC2	GGGCAAGGCTCTTAGGGTCTTCATTC	26
RV	GTGAAATACCACACAGATGCGTAAG	25