

Table S1 Primers used in this study

Primer #	Use in study	Sequence
1	<i>blpA</i> F common for RFLP, confirmation <i>blpI</i> cloning, <i>blpKin</i> cloning A76	GAGGAACAAATGTACGTTTATA
2	<i>blpY</i> R common primer for RFLP	ATAGAAGTTGATACTTTTTTCAT
3	in <i>blpA</i> for repeat determination	GAAGAGATTAGGGTTTTGTGCCA
4	in <i>blpA</i> for repeat determination	AGCCGCTGATGAAATGGGC
5	<i>blpI</i> deletion cloning F PstI	GGGCCCTGCAGGTGAGCGACTTTATAGT TTCAATCCC
6	<i>blpI</i> deletion cloning R KpnR	TTCTAAAGTTCCTAAAATGATTGGTACCGG GCCC
7	<i>blpI</i> deletion inverse pcr F	CCCGGGATGCATTAAGATTATGATTCTTAA ATATA
8	<i>blpI</i> deletion inverse pcr R	CCCGGGATGCATGACAAATACTCCTTTTTT ATT
9	confirmation <i>blpI</i> cloning R	CCCGGGAGATTTCAATAATCTTGAGTAT
10	janus amplification F NsiI	GATCATGCATGTTTGATTTTTTAATGGATAA T
11	janus amplification R NsiI	ACCTATGCATCTTTCCTTATGCTTTTGGAC
12	<i>blpW1,2</i> deletion cloning F	GGGCCCGGTACCCAAAAATAGGAGAATAT TTTTC
13	<i>blpW1,2</i> deletion cloning R	CCCGGGATGCATGACAAATACTCCTTTTTT ATT
14	<i>blpW1,2</i> inverse PCR F smaI	GCGCGCCCCGGGACAAATACTCCTTTTT AAAAA
15	<i>blpW1,2</i> inverse PCR R smaI	GCGCGCCCCGGGTAAAAAATCATCTAGAC ATTAAA
16	janus amplification F SmaI	GACTTGCCCGGGTCATTAGCTTTTTTAGTG GA
17	janus amplification R SmaI	GACTTCCCCGGGGAGCACTTTGTAAGTCT GTTG
18	<i>blpKin</i> clone R A76 <i>blpL</i> R	TCTCGCAAGGAAGATGTTCCG
19	<i>blpG</i> truncation cloning NsiI	GGGCCCATGCATGAAGAACATAAGTTTTA TCTTT
20	<i>blpG</i> truncation cloning XbaI	GGCCTCTAGACAGCTGAAAGAAAGACAGC A
21	<i>blpG</i> truncation check	GGACAATGCTAAAAAATCAT

22	<i>lacZ</i> R to confirm chromosomal integration, reverse primer to amplify <i>blpA::KanR-rpsL+</i> and <i>blpA_{FS}</i>	TCAAAAATAATTTCGCGTCTG
23	<i>tdpA</i> clone F	TAAAAAGTAGAGCTTAATGAA
24	<i>tdpA</i> clone R	AAATTTTCCATCCAATCATAA
25	outside <i>tdpA</i> clone F	TATCATGCTTCTGCTTATGT
26	outside <i>tdpA</i> clone R	CCTTAACAATGTTAGTATAC
27	in <i>blpA</i> F for <i>blpI</i> deletion	TTATCTTTATGGGGTTGATAG
28	in <i>pncC</i> R for <i>blpI</i> deletion	CCCGGGAGATTTCAATAATCTTGAGTAT
29	in <i>blpG</i> R for <i>blpI</i> deletion	GGCTTTTCCAAGGACGGTAG
30	<i>blpI-J</i> ko gibson upstream	TTATCTTTATGGGGTTGATAG
31	<i>blpI-J</i> ko gibson upstream	ataagtcttaTTGTTCCATCATTTTTGTATTC
32	<i>blpI-J</i> ko gibson downstream	atggaacaTAAGACTTATAGTAAAATTATGAGGATTC
33	<i>blpI-J</i> ko gibson downstream	CTACGGAAAAATTTAAAAACTG
34	<i>blpJ</i> ko only gibson	ataagtcttaCTGTGACAACATTTTTGTATTC
35	<i>blpJ</i> ko only gibson	ttgtcacagTAAGACTTATAGTAAAATTATGAGGATTC
36	<i>blpKin</i> ko gibson upstream	CTGTTATGGATAATGAAGAACTC
37	<i>blpKin</i> ko gibson upstream janus	taaggaaagTTGTGACATCATTTTTGTATCC
38	<i>blpKin</i> ko janus gibson	atgtcacaCTTTCCTTATGCTTTTGGAC
39	<i>blpKin</i> ko janus gibson	tatccttttGTTTGATTTTTAATGGATAATGTG
40	<i>blpKin</i> ko gibson downstream janus	ttaaaaatcaaacAAAAAGGATACAGATAGTACC CC
41	<i>blpKin</i> ko gibson downstream	GAATACTCCTTACATTTGTTATCTTTATC
42	<i>blpKin</i> ko gibson in frame	tatccttttTTGTGACATCATTTTTGTATCC
43	<i>blpKin</i> ko gibson in frame	atgtcacaAAAAAGGATACAGATAGTACCCC
44	<i>blpKout</i> ko gibson upstream	GAACTTATGAATTACTGGCG
45	<i>blpKout</i> ko gibson upstream	attcagacaCTTTCCTTATGCTTTTGGAC
46	<i>blpKout</i> ko spect gibson	gaatcataacGTTTGATTTTTAATGGATAATGTG

47	<i>blpKout</i> ko spect gibson	aaatccataaCAATTTTTTTATAATTTTTTTAATC TG
48	<i>blpKout</i> ko gibson downstream	taaaaaaattgTTATGGATTTTAAAAGTTTTATT ATTG
49	<i>blpKout</i> ko gibson downstream	CACTAATATAGGGATAAAAAGAGAGC
50	<i>blpB</i> F primer to amplify <i>blpA::KanR-rpsL+</i> and <i>blpAFS</i>	GATAAAAATGGCTCCTCTGC
51	<i>blpS-C</i> ko gibson upstream	CAACTCTTCCGCTGGAC
52	<i>blpS-C</i> ko gibson upstream janus	taaggaagTGTCTGAATAATCATATGTTTCAT TG
53	<i>blpS-C</i> ko janus gibson	attcagacaCTTTCCTTATGCTTTTGGAC
54	<i>blpS-C</i> ko janus gibson	gaatcataacGTTTGATTTTAAATGGATAATGTG
55	<i>blpS-C</i> ko gibson downstream janus	aaaatcaaacGTTATGATTCTCCTTTTTGATAAG
56	<i>blpS-C</i> ko gibson downstream	CATAATACCTTATGAATTTACTAAAC
57	<i>blpS-C</i> ko gibson in frame	gaatcataacTGTCTGAATAATCATATGTTTCAT TG
58	<i>blpS-C</i> ko gibson in frame	attcagacaGTTATGATTCTCCTTTTTGATAAG
59	<i>iga::kan</i> gibson upstream	TACCGTGTAATTTTCATGGTAG
60	<i>iga::kan</i> gibson upstream	aatcaaacggaCGCCTTATCACTTACTACAGC
61	<i>iga::kan</i> gibson kan	tgataaaggcgTCCGTTTGATTTTAAATGGATAA TG
62	<i>iga::kan</i> gibson kan	tattgccaactCTAAAACAATTCATCCAGTAAAA TATAATATTTTATTTTC
63	<i>iga::kan</i> gibson downstream	aattgttttagAGTTGGCAATAAGGTAGTACAC
64	<i>iga::kan</i> gibson downstream	CTATTTTTTATTCTCAAAAATTGAACTTC