

Table S1: Primer list

Primer	Sequence	PCR-template	PCR-product
malEFG-for	AAGGTAAACTGGTAATCTGGATTAACGGCGATAAAAGG CTATAACGGTCTCGCTGTCAAGGCGCACTCCCGTTCTG G	pJF-futC-FRT- cat-FRT	P _{tac} - <i>futC</i> -FRT-cat- FRT for the replacement of <i>malEFG</i>
malEFG-rev	GATCGGTAATGCAGACATCACGGCAGCGGGCAGAAA GTCACCCACAGGTAGTTTTAGGGTTATTGTCTCATG AGCG		
fucIK-for	CCGAATAAAGTGAGGAATCTGTAATGAAAAAATCA GCTTACCAGAAAATTGGTCAAGGCGCACTCCCGTTCTG G	pJF-futC-FRT- cat-FRT or pJF- fkp-FRT-cat- FRT	P _{tac} - <i>futC</i> -FRT-cat- FRT or P _{tac} - <i>fkp</i> -FRT- cat-FRT for the replacement of <i>fucIK</i>
fucIK-rev	GTTAACCCCTCCAGCGCCGCGGATAGAAATGCCCC GCGTGGTATTAAGCAGGGTTATTGTCTCATGAGCG		
xylAB-for	GACGAACTGGTGTGGGTAAGCGTATGGAAGAGCACT TGCGTTTTGCCGCTGCTCAAGGCGCACTCCCGTTCTG G	pJF-gmdwcaG FRT-cat-FRT	P _{tac} - <i>gmdwcaG</i> -FRT- cat-FRT for the replacement of <i>xylAB</i>
xylAB-rev	ATTAAGCTGGGACATTGCTCAGGCCGGTTAATTCG CGGCCAATCCAGACACCAGGGTTATTGTCTCATGAG CG		
rbsDK-for	ACCGTTCCTAATTCTGATATTCATCGGTGATCTCCCG TCTGGGACATACCGATATGCATGCATCGATCACCACA ATT	pJF-manC-FRT- kan-FRT	P _{tac} - <i>manC</i> -FRT-kan- FRT for the replacement of <i>rbsDACBK</i>
rbsDK-rev	ATTCACGCTAGCCCATACACCACGACTTCTAAAGTA ATCAGTACAGTACGGATAACC CAGGGTTATTGTCTCATGAGCGGATAC		
melAB-for	CGGCGCATATTGCCCTGATGGACATTGACCCACCCG CCTGGAAGAGTCGCATATTGTTCAAGGCGCACTCCCG TTCTGG	pJF-manB-FRT- cat-FRT	P _{tac} - <i>manB</i> -FRT-cat- FRT for the replacement of <i>melAB</i>
melAB-rev	AGCGCAACGATGGCTTTAAGTGTCAGATGGCTTCCTT CAGCAGACGGTTGATTGTCTGCAGGGTTATTGTCTCAT GAGCG		
araBAD-for	TCTATAATCACGGCAGAAAAGTCCACATTGATTATTT GCACGGCGTCGCTCAAGGCGCACTCCCGTTCTGG	pJF-fkp-FRT- cat-FRT	P _{tac} - <i>fkp</i> -FRT-cat-FRT for the replacement of <i>araBAD</i>
araBAD-rev	ATATAAGCGACCTCTTCCAGCACGATGGCGTTATGCA CCGCATCTCCGTCAGGATGGCCTTCTGCTTAATTGA TGCC		