

Supplement 1. Sources and characteristics of plasmids and primers used in this study.

Plasmids		
<i>pflB</i> deletion		
pLOI4667	<i>bla kan; pflB</i> from <i>E.coli</i> cloned into pCR2.1-TOPO	This study
pLOI4668	<i>cat-sacB</i> cassette cloned into <i>pflB</i> of pLOI4667	This study
pLOI4669	<i>PacI</i> digestion of pLOI4668, self-ligated	This study
<i>pck</i> promoter change		
pLOI4736	<i>bla kan; pck-P</i> from <i>E.coli</i> cloned into pCR2.1-TOPO	This study
pLOI4737	<i>cat-sacB</i> cassette cloned into <i>pck-P</i> of pLOI4736	This study
<i>ptsI</i> deletion		
pLOI4734	<i>bla kan; ptsI</i> from <i>E.coli</i> cloned into pCR2.1-TOPO	This study
pLOI4735	<i>cat-sacB</i> cassette cloned into <i>ptsI</i> of pLOI4734	This study
pLOI4735B	<i>PacI</i> digestion of pLOI4735, self-ligated	This study
<i>gldA</i> deletion		
pLOI4296	<i>bla kan; gldA</i> from <i>E.coli</i> cloned into pCR2.1-TOPO	This study
pLOI4297	<i>cat-sacB</i> cassette cloned into <i>gldA</i> of pLOI4296	This study
pLOI4298	<i>PacI</i> digestion of pLOI4297, self-ligated	This study
Primers		
<i>pflB</i> deletion		
pflB-up2	TGTCCGAGCTTAATGAAAAGTT	This study
pflB-down2	CGAGTAATAACGTCCTGCTGCT	
pflB-5	AAACGGGTAACACCCCAGAC	
pflB-6	CGGAGTGTAACGTCAACA	
<i>pck</i> mutation		
pck-Pro-up	CACGGTAGCAACAACATTGC	This study
pck-Pro-down	AGAAAGCGTCGACAACGAAC	
pck-Pro-1	ATGCGCGTTA ACAATGGTTT	
pck-Pro-2	ATGGATAACG TTGAACTTTC	
pck-P-1	GTTGGTTATC CAGAATCAAA	
pck-P-2	TTCCTGCTC CTTAGCCAAT	
<i>ptsI</i> deletion		
ptsI-D-up	CGCATTATGTTCCCGATGAT	This study
ptsI-D-down	GCCTTTCAGTTCAACGGTGT	
ptsI-D-1	CGGCCCAATTTACTGCTTAG	
ptsI-D-2	ATCCCCAGCAACAGAAGTGT	
<i>gldA</i> deletion		
gldA-up	TGTATATAGCGCCGCACAAG	This study
gldA-down	GATGGCAAGGTTGGTATTGG	
gldA-1	ACCAGTACGGTCAGCGTTTC	
gldA-2	ACCCGGTGATTGAATAATGC	

<i>glpA</i> deletion		
glpA-D-up	ATGAAAACCTCGCGACTCGCAATCAAGTGACGT GATTATCATTGGC GTGTAGGCTGGAGCTGCTTC	This study
glpA-D-down	TCAAAGCGCATCTTTCTGCTCCTTCTCCAGACCA CACAATCCCTG CATATGAATATCCTCCTTAG	
<i>dhaKL</i> deletion		
dhaKL-D-up	ATGAAAAAATTGATCAATGATGTGCAAGACGTA GGACGAACAA GTGTAGGCTGGAGCTGCTTC	This study
dhaKL-D-down	TTACTCTTTTTCGGGCTAACGCCAACATTTGCATCAT AAACATCAC CATATGAATATCCTCCTTAG	
<i>dhaM</i> deletion		
dhaM-D-up	GTGATGGTAAACCTGGTCATAGTTTCACATAGCA GCCGACTGGGA GTGTAGGCTGGAGCTGCTTC	This study
dhaM-D-down	TTAACCTGACGGTTGAAACGTTGCGTTTTAACG TCCAGCGTTAG CATATGAATATCCTCCTTAG	
<i>ptsA</i> deletion		
ptsA-D-up	ATGGCCCTGATTGTGGAATTTATTTGTGAGCTACC TAA CGGCGTA GTGTAGGCTGGAGCTGCTTC	This study
ptsA-D-down	TTACAGTTCAGTTCATGTTGCAGCAGGCTGGCGA TAG CGTCGGC CATATGAATATCCTCCTTAG	
<i>ptsH</i> deletion		
ptsH-D-up	ATGTTCCAGCAAGAAGTTACCATTACCGCTCCG AACGGTCTGCAC GTGTAGGCTGGAGCTGCTTC	This study
ptsH-D-down	TTACTCGAGTTCCGCCATCAGTTTAACCAGATG TTCAACCGCTTT CATATGAATATCCTCCTTAG	
