Supplemental Table 1. List of Primers.

Primer	Sequence (**Boldface** characters indicate the 20 nucleotides homologous to the FRT-PGK-gb2-neo-FRT cassette.)	deletion
Primers for Gram-negative deletions		
Ecoli-pgaA-del5F	CTGTAATTAGATATAGAGAGAGATTTTGGCAATACATGGAGTAAT ACAGG**AATTAACCCTCACTAAAGGGCGG**	*pgaA*
Ecoli-pgaA-del3R	ACTCACCAGCATCAGGATATATTTATTTCCATTACGTAACATATTT ATCC**TAATACGACTCACTATAGGGCTC**	*pgaA*
Ecoli-pgaB-del5F	CACAACTTATACGTTGAATTCGATATGACATTCAGATTTTAAGGAT AAAT**AATTAACCCTCACTAAAGGGCGG**	*pgaB*
Ecoli-pgaB-del3R	ATGCATAACACCAGACATAATATAAAAAACGATACGATGCGATTAA TCAT**TAATACGACTCACTATAGGGCTC**	*pgaB*
Ecoli-pgaC-del5F	CCAGTAAACGTACTGGTGATTGTCGGGTCGTAATAATTAAATTGTT CATA**AATTAACCCTCACTAAAGGGCGG**	*pgaC*
Ecoli-pgaC-del3R	ACCTTATTCGTCCTGAGTTTTCAACAGCCTGGTATCCGAAAAATGA TTAA**TAATACGACTCACTATAGGGCTC**	*pgaC*
Ecoli-pgaD-del5F	GCAACGCGCCCGTTGGGTAAGTCCCGATCGCGGGATTCTGAGAGGT TAAT**AATTAACCCTCACTAAAGGGCGG**	*pgaD*
Ecoli-pgaD-del3R	AGTGTATTATCGGCGCAGAGCCCGGGCGAACCGGGCTTTGTTTTGG GTGT**TAATACGACTCACTATAGGGCTC**	*pgaD*
Kp-pgaC-del5F	TGATATCTCCCGTATCAGGCCGCAATTTTCTTCCTGGTGGTACCCTG ACC**AATTAACCCTCACTAAAGGGCGG**	*pgaC*
Kp-pgaC-del3R	AGCCGGGGCAGCACACGGTGTTCGGTTAAGATGAGCGTATTTTCAT TCAT**TAATACGACTCACTATAGGGCTC**	*pgaC*
Kpdelpga locUP	AGATCACCTTATTCAAATACGTTATTGTTTAATCGCAACACGAAAC TCTC**AATTAACCCTCACTAAAGGGCGG**	*pga* locus
Kpdelpga locDOWN	GGTAACGCGTGGCTTTTTAAATCAATAATCTGCCCGATTTGATCGT GGTA**TAATACGACTCACTATAGGGCTC**	*pga* locus
Primers for *B. subtilis*		
3971	AGGAG**GAATTC**TTAAAAAGGATTTGACTTCATGGACA	epsA up
3972	CTCCT**CTCGAG**CATATTCTCATTCATGTATTCATAGC	epsA up
3973	AGGAG**CTCGAG**AAACATTTCGGGGAGTGAAGCGA	epsA down
3974	CTCCT**GGATCC**AATAGTGTTCCGATTTTTTCATTTTCT	epsA down
3975	AGGAG**GAATTC**AGAATTATATGCGATTGTCAGACACA	epsB up
3976	CTCCT**CTCGAG**TTTTCTAAAGATCACTCGCTTCACT	epsB up
3977	AGGAG**CTCGAG**GAACACTATTCCTACTAGTTTTTGTA	epsB down
3978	CTCCT**GGATCC**AGTCCCACCTGAGCCCGCCC	epsB down
3979	AGGAG**GAATTC**AAATCAGTTGTTGCGGAACAATATC	epsC up
3980	CTCCT**CTCGAG**CAGCGCAATAATCATTGACAGTCT	epsC up
3981	AGGAG**CTCGAG**GCTGCCAGCGTTCATTAGGGG	epsC down
3982	CTCCT**GGATCC**CCTCAAGCACATTCATACCGAGG	epsC down
1278	AGGAG**GGATCC**GGCGGCCCGGTGACAGTAACA	epsD up
1279	CTCCT**GTCGAC**AGTCGCGCAAAACAATATCTTTTTC	epsD up
1280	AGGAG**GTCGAC**ATGGATATGGATACAAAGGAGAAAAG	epsD down
1281	CTCCT**GAATTC**GCGAAGCCACAAATCAATATCTTC	epsD down

1282	AGGAG**GGATCC**TTGGCACCGGCATGCTTGTGTTT	epsF up
1283	CTCCT**GTCGAC**ATGGAGCACGCGCTTTTGGCTGC	epsF up
1284	AGGAG**GTCGAC**AACATCAGCACGGAAAAGGACCAT	epsF down
1285	CTCCT**GAATTC**CCATGTATTGCCTGATGCCGTTAA	epsF down
2357	AGGAGGAATTCGTGCGCTTATGATGAAGAGATTTTAT	epsG up
2358	CTCCTCTCGAGCCAAATAAATACAATCCCCATATTGAC	epsG up
2359	AGGAGCTCGAGCCGGTCGATTCATCGGTTCTGC	epsG down
2360	CTCCTGGATCCACACCGGGTCCGCGCATATCAC	epsG down
2114	AGGAG**GAATTC**CAGACGTACACGCTGTTGTACGA	epsH up
2115	CTCCT**CTCGAG**ATAAACAGCGACTAACAGACTAACC	epsH up
2116	AGGAG**CTCGAG**GCTGTGTATCAGCGGGTGATCG	epsH down
2117	CTCCT**GGATCC**TTAAGCCATTGATAGCCCTCCATC	epsH down
3983	AGGAG**GGTACC**TCAGAACGTGTCTCGAATCACTG	epsI up
3984	CTCCT**CTCGAG**CGATTGTAACGACATGTCCTCAC	epsI up
3985	AGGAG**CTCGAG**AGCGGTGAAGCGCAATGATCCC	epsI down
3986	CTCCT**AAGCTT**GCTTGATGAGAAAAGTGAGCCGC	epsI down
1286	AGGAG**GGATCC**CGCAGAACGCGAAGGGGTTTATA	epsJ up
1287	CTCCT**GTCGAC**CGGGACAATAATGCTGACGAGCG	epsJ up
1288	AGGAG**GTCGAC**GGGACAATGAAAGGCAGTGCGAA	epsJ down
1289	CTCCT**GAATTC**CCTGAATGGAACTGGTGATATAAAG	epsJ down
4068	AGGAG**GGTACC**TAAACATGCTCACGAAACGAGATT	epsK up
4069	CTCCT**CTCGAG**TATCGTGAATTTCATGCCTGCTTC	epsK up
4070	AGGAG**CTCGAG**ACGGGAGTGACAGTCAGCTTTTG	epsK down
4071	CTCCT**AAGCTT**ACCAGTTGTCAACGTACCAAACAT	epsK down
2361	AGGAG**GAATTC**AAATGCTTATACGGGTGCTGTCTG	epsL up
2362	CTCCT**CTCGAG**CAAAAAAATGGCGGCCGTCAGATC	epsL up
2363	AGGAG**CTCGAG**CATGTGACCGCGGAACGGTTTAC	epsL down
2364	CTCCT**GGATCC**CATATAGAATCGGATTGGCGGTTG	epsL down
1487	AGGAG**GAATTC**TACGTATCCCGCATTACAGGCTAC	epsM up
1488	CTCCT**CTCGAG**TATCAGCTCTCTGATCACCTTTCC	epsM up
1489	AGGAG**CTCGAG**GTGCTCCGGCACGCATCATTTCT	epsM down
1490	CTCT**GGATCC**CCGTTATCAAGTGTGAGCGTGGT	epsM down
1491	AGGAGGAATTCGAATGTCCTGAAGGGCGATCTG	epsN up
1492	CTCCTCTCGAGCTCCCTGCCGCTCATATGAGG	epsN up
1493	AGGAGCTCGAGGTCATTGAAGTGCTACTGCACTTA	epsN down
1494	CTCCTGGATCCCTTCCGCTCACATGTGAGCAGGA	epsN down
3991	AGGAG**GAATTC**TGAAATCGTAAGCCTGTGTGATGC	epsO up
3992	CTCCT**CTCGAG**TTTCTGTTTCAGGCTGATCATCGA	epsO up
3993	AGGAG**CTCGAG**CTCATCCAGCACGCCTCAAAGAA	epsO down
3994	CTCCTGGATCCGGCCGATACAGATAATCGCCGT	epsO down

Cassette primers: Complementation	**Boldface** characters indicate restriction sites
Ecoli-pgaA-compF	TTTTT**TCTAGA**CGGATTATGAGGTGCAAAAATATCTTTCTTTTCAGTTACC
Ecoli-pgaA-compR	TTTTT**CCTGCAGG**AGTGAGCATAATTATACTCACCAGCATCAGG
Ecoli-pgaB-	TTTTT**TCTAGA**TTATGACGGTGACAGAGAACACAACTTATACG

compF	
Ecoli-pgaB-compR	TTTTT**CCTGCAGG**TACGCATAGGGGGATGCATAACACC
Ecoli-pgaC-compF	TTTTT**GAGCTC**AGTGAAAAACTATGGTTATTATCCCGACAATTTTCTGC
Ecoli-pgaC-compR	TTTTT**TCTAGA**TTCTGGCCTCGCTTTGCCAGTAATAACCC
Ecoli-pgaD-compF	TTTTT**TCTAGA**TGTTGATGCCTAAAAAGCAACGCGC
Ecoli-pgaD-compR	TTTTT**CCTGCAGG**CGGGCGAACCGGGCTTTGTTTTG
Bsub-epsH-compF	TTTTT**TCTAGA**ATGCCGGTCGATTCATCGGTTCTG
Bsub-epsH-compR	TTTTT**CCTGCAGG**TTTAGCAGCAGCCATTCTGCAAAATTGATTTTCAACG
Bsub-epsI-compF	TTTTT**TCTAGA**GCGAAATACAGAATGATTCCGTTCGTCGC
Bsub-epsI-compR	TTTTT**CCTGCAGG**TACATCGGGACAATAATGCTGACGAGCG
Bsub-epsJ-compF	TTTTT**TCTAGA**AAAAGAAACATCCCGTGCAGGCTTTCCG
Bsub-epsJ-compR	TTTTT**CCTGCAGG**AAGCCGTGAGATTCGCGCTG
Bsub-epsK-compF	TTTTT**TCTAGA**TTAGCACTGTGTAAATGGCGGCTCAC
Bsub-epsK-compR	TTTTT**CCTGCAGG**CCGGCCTTACTTGCTTAAAGAAGA