

Supplementary Table S4: Primers used in this study

Strain construction and analysis	Name	Sequence
<i>ΔlacI::cat</i>	lacI.ext-5	5'-GGGCGATCTGTTGCGCGAAG-3'
	lacI.500-5	5'-CTTATCCTTTCACCGGGCAATG-3'
	lacI.cat.L-3	5'-CTGCGAGTGATCTTCCGTCACAGGATTCACCACCCTGAATTGACTCT-3'
	lacZ.cat.L-5	5'-GATGAGTGGCAGGGCGGGCGTAATAATAACCGGGCAGGCCATGTC-3'
	lacZ.500-3	5'-CGACCAAATTCGAAATTACTG-3'
	lacZ.ext-3	5'-CAAACCTGATTATTGATGGTGAACA-3'
<i>Δ12208::KmGB</i>	12208.ext-5	5'-TAAATCAGTAAGTTGGCAGCATC-3'
	12208.500-5	5'-AAATTATAGGGTAACTCATGC-3'
	12208.kmGB.L-3	5'-GATTTTGAGACACAACGTGGCTTTGACTTCTAGTATCGCGTGAG-3'
	12208.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCATTCCGCCAGATCCGTTACGGCATG-3'
	12208.500-3	5'-TGTTTTAAAAATGAACAGAGCAAAC-3'
	12208.ext-3	5'-TCCTGTCAGGTGTGGTCACTGCGAC-3'
<i>Δ6759::KmGB</i>	6759.ext-5	5'-GTATTATATGAATAGCCATAATGG-3'
	6759.500-5	5'-TTTACCACACCATTGAGTATGC-3'
	6759.kmGB.L-3	5'-GATTTTGAGACACAACGTGGCTTTGGGGCTAGCCCAAATGCAGGTAAG-3'
	6759.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCCGCGCTGGCACTTGAGCTCAACCC-3'
	6759.500-3	5'-CACAGGTATATGAACTGGCAAATC-3'
	6759.ext-3	5'-CCGTTAAACTCAGGCTACCTCAG-3'
<i>Δ2974::KmGB</i>	2974.ext-5	5'-TGGTCAATATCATGGAATTACCTTAG-3'
	2974.500-5	5'-GCAAGTATAAAAACAATTTCCGCC-3'
	2974.kmGB.L-3	5'-GATTTTGAGACACAACGTGGCTTTACTGGTTGACCTTCACCACC-3'
	2974.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCAGGCACATATTTGAGAGAGC-3'
	2974.500-3	5'-CTATAAAAAACAGTCATCAACC-3'
	2974.ext-3	5'-GTTTCGCACCTTCCTTAGTTGC-3'
<i>Δ1040::KmGB</i>	1040.ext-5	5'-CCAGCAACTGCTTGGTATCTTTTCG-3'
	1040.500-5	5'-CGCGGATCCAGGCATACCCC-3'
	1040.kmGB.L-3	5'-GATTTTGAGACACAACGTGGCTTTGGAAGCGGTTATTCGCGATGT-3'
	1040.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCGTAGAGGTGTTGAAGTGGTTAG-3'
	1040.500-3	5'-CTGCGTTAATGAATGCAAAAACC-3'
	1040.ext-3	5'-GCCGGTGGTGCCTGTAACGTTG-3'
<i>Δ9291::KmGB</i>	9291.ext-5	5'-GACATAGGCGTCAATCATATGG-3'
	9291.500-5	5'-CGGCAGTAAACATCTCTTCAAAAC-3'
	9291.kmGB.L-3	5'-GATTTTGAGACACAACGTGGCTTTGATAAAAACCGTGGTGATCCCGTTTG-3'
	9291.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCATTGGCGTAAACCAGAACCAAAAAC-3'
	9291.500-3	5'-AAAGAGGAATTGCTTTGAGTC-3'
	9291.ext-3	5'-AACGTTGAGTCCAGAGCTGATGTG-3'
<i>ΔgalF-his::KmGB</i>	galF-his.ext-5	5'-GCTGGCGGAAGTCCAGGCCATTTGC-3'
	galF-his.500-5	5'-GCGCCCGCCCGGTAGTCGGGG-3'
	galF-his.kmGB.L-3	5'-CTTCACGAGGCAGACCTCAGCGCCTTAAATCCAGCCCCTGATCCTGC-3'
	galF-his.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCTTAGTGACGACTCTTCAGATTATC-3'
	galF-his.500-3	5'-GGTATCCGGCGAAGTGCTAATGC-3'
	galF-his.ext-3	5'-ATGTTGACTGAACAGCTGGACTGGG-3'
<i>ΔrfaH::KmGB</i>	rfaH.ext-5	5'-CGCTTTGTCGGCATGTTCAATAC-3'
	rfaH.500-5	5'-CTGCGGCAGTTTATCAAACAGGTC-3'
	rfaH.kmGB.L-3	5'-GATTTTGAGACACAACGTGGCTTTCATAATGACTCTTATCCGTTTAATC-3'
	rfaH.kmGB.L-5	5'-CTTCACGAGGCAGACCTCAGCGCCTAAAACGCAATCCCAAACAGTG-3'
	rfaH.500-3	5'-CTCGACTTAAACCGCAACTTTTC-3'
	rfaH.ext-3	5'-GTGGTGGCGATTGGTGAATG-3'

<i>ΔrfaH::lacZzeo</i>	<i>rfaH.lacZzeo.L-3</i>	5'-CGTTGTAAAACGACGGCCAGTGAATCCGTAATCATGGTCATAATGACTCT TATCCGTTTAATC-3'
	<i>rfaH.lacZzeo.L-5</i>	5'-CCGGCAACTGCGTGCCTTCGTGGCCGAGGAGCAGGACTGAAACGCAATCCCAAACAGTG-3'
<i>ΔrcsB::spec</i>	<i>rcsB.ext-5</i>	5'-AAATGCTCGCAGCTGACCC-3'
	<i>rcsB.500-5</i>	5'-ATTCGGAATATTGTCACTCG-3'
	<i>rcsB.spec.L-3</i>	5'-GTATTTATTCGGCGCAATTGACGCCATTACCTGTAGGCCAGATAAGACG-3'
	<i>rcsB.spec.L-5</i>	5'-TAAACTGCTTGGTGCCAGCCAATGAGTAATAGGCTACCTTGCTACAGCAAG-3'
	<i>rcsB.500-3</i>	5'-CAGATCAGTTGGGATCGTTG-3'
	<i>rcsB.ext-3</i>	5'-TGCCGTCAACGGACAAAGCGG-3'
<i>ΔrpoN::spec</i>	<i>rpoN.ext-5</i>	5'-ATTCGTTATGGCAACATTAAGTGC-3'
	<i>rpoN.500-5</i>	5'-CCTCCATTTCCGTCGCCTCAGC -3'
	<i>rpoN.spec.L-3</i>	5'TATTTATTCGGCGCAATTGACGCCATTACCTTCAGAACGTAATCGTACTCTCTCTGCTAAAACG -3'
	<i>rpoN.spec.L-5</i>	5'-TAAACTGCTTGGTGCCAGCCAATGACCCAACCGATAAGGAAGACT-3'
	<i>rpoN.500-3</i>	5'-GGACGCGGCTTCGCGTACATTCC -3'
	<i>rpoN.ext-3</i>	5'-GGCGGCAGGCTAAGTTGTTTC-3'
<i>Δcrr::spec</i>	<i>crr.ext-5</i>	5'-CAGCTCCGCGCTATCCTGCGTGCC-3'
	<i>crr.500-5</i>	5'-AAACAGGAACTGCGCGACGAAAGG-3'
	<i>crr.spec.L-3</i>	5'-GTATTTATTCGGCGCAATTGACGCCATGATCTTCTCCTAAGCAGTAAATTGG-3'
	<i>crr.spec.L-5</i>	5'-TAAACTGCTTGGTGCCAGCCAATGATTCTTGCCGAGTAAAAATGG-3'
	<i>crr.500-3</i>	5'-AATCCTTGCCGAGTGGCTGACTGC-3'
	<i>crr.ext-3</i>	5'-CGTCGCCGTGCAGTCGCAGGTGG-3'
<i>ΔphoP::apra</i>	<i>phoP.ext-5</i>	5'-GACTTCGAAAACCTCCGAAGGG-3'
	<i>phoP.500-5</i>	5'-CCAACGCGGTATTGCAGCATCTGG-3'
	<i>phoP.apra.L-3</i>	5'-CAAGGGCTCCAAGGATCGGGCCTTCTTAATTATTAATAAGTGTAAACG-3'
	<i>phoP.apra.L-5</i>	5'-CGCCAGTCGATTGGCTGAGCTCATGATGAAAAAATTAAGTGTAAACG -3'
	<i>phoP.500-3</i>	5'-GCACATAGATAAACCCAGCTCC -3'
	<i>phoP.ext-3</i>	5'-CGATGGGGCGTAAACTCCACCAGG-3'
<i>ΔoxyR</i>	<i>oxyR.ext-5</i>	5'-TGAAACGTCCACGTTGCCAGGA-3'
	<i>oxyR.500-5</i>	5'-CGTTCCGCGAGGCGCACCATAT-3'
	<i>oxyR.500-3</i>	5'-CTGAAGGTCAACAGCATGTATC-3'
	<i>oxyR.ext-3</i>	5'-ATACCGATTGCTGGCGTTACA-3'
<i>Δdam</i>	<i>dam.ext-5</i>	5'-TAACTACGACAACCTGAACG-3'
	<i>dam.ext-3</i>	5'-AGGCACAATGCGATCGACGG-3'
<i>ΔluxS::cat</i>	<i>luxS.ext-5</i>	5'-ATGAGCAGTAGCGAACTTGC-3'
	<i>luxS.500-5</i>	5'-ACGCTGGATAGTATTAACGGC-3'
	<i>luxS.cat.L-3</i>	5'-GAAGTGATCTTCCGTACAGTTAGCCACCTCCGGTAATTTTT -3'
	<i>luxS.500-3</i>	5'-GGCCGAGTTTATCCAGGGG-3'
	<i>luxS.ext-3</i>	5'-TACCTTTGAACCCAGGTATGG-3'
	<i>luxS.cat.L-5</i>	5'-GAGTGGCAGGGCGGGGCGTAATCAGTAAACTATCTTCACAATTA-3'
<i>Δhns::KmFRT</i>	<i>hns.ext-5</i>	5'-TTCTACTTTTCATCATTTCG-3'
	<i>hns.ext-3</i>	5'-TTCGTTGAATACGGTATTTCG-3'
<i>ΔrpoS::km</i>	<i>rpoS.ext-5</i>	5'-TCGCAACCGACAATTACGTATT-3'
	<i>rpoS.500-5</i>	5'- GTTGCCGAACAACAAGCCAACTG -3'
	<i>rpoS.500-3</i>	5'- CTAAGTGGCGGTTAGTATTTG -3'
	<i>rpoS.ext-3</i>	5'-CGCGGCTGGAGCTTACAACAC-3'
<i>ΔkpsD::KmGB</i>	<i>kpsD.ext-5</i>	5'-TTGCGCTTAAGTTTAAACCAAACCG-3'
	<i>kpsD.500-5</i>	5'- GACCAGCTTGCCTTTGCAGAAAACG -3'
	<i>kpsD.kmGB.L-3</i>	5'- GATTTTGAGACACAACGTGGCTTTCATCACAAACTCATTACAGCGACA -3'
	<i>kpsD.kmGB.L-5</i>	5'- TGCTCGATGAGTTTTTCTAAGGAGTTGAAATGAGCAA -3'
	<i>kpsD.500-3</i>	5'-CTTTTTCAGCATTACGCGGATAGG-3'
	<i>kpsD.ext-3</i>	5'- GCTCTGGCATGGACTCCGGTAACT -3'

<i>ΔgfcE::lacZzeo</i>	<i>gfcE.ext-5</i>	6759.ext-5
	<i>gfcE.500-5</i>	5'-GTAAAAAAAATAGTTACGCTAAGG -3'
	<i>gfcE.lacZzeo.L-3</i>	5'-CGGCAACTGCGTGCACTTCGTGGCCGAGGAGCAGGACTGATGACATATGTTTGACTCTGTATTAG-3'
	<i>gfcE.lacZzeo.L-5</i>	5'-CGTTGTAAAACGACGGCCAGTGAATCCGTAATCATGTGATAATGTCCACATCATCAGTAAACCAA-3'
	<i>gfcE.500-3</i> <i>gfcE.ext-3</i>	5'-CGTACTAATTACATATACACGCATC-3' 6759.ext-3
<i>Δetk::lacZzeo</i>	<i>etk.ext-5</i>	5'-ACAAAATCATTGCTGTATCC-3'
	<i>etk.500-5</i>	5'-CACTTGTAAGATGGAATCGCG-3'
	<i>etk.lacZzeo.L-3</i>	5'-GCGTGCACTTCGTGGCCGAGGAGCAGGACTGACAATAATATATTAATGATATCTGGGG-3'
	<i>etk.lacZzeo.L-5</i>	5'-CCAGTGAATCCGTAATCATGGTCAATAAATATGTCCCGCTTTATCAACGAAGTCTCTGAGC-3'
	<i>etk.500-3</i> <i>etk.ext-3</i>	5'-TTACCACACCATTGAGTATGC-3' 5'-GTATTATATGAATAGCCATAATGG-3'
<i>Δkp1657::lacZzeo</i>	<i>kp1657.ext-5</i>	12208.ext-5
	<i>kp1657.500-5</i>	5'-GCGAGTACTCCTCATTGATGC-3'
	<i>kp1657.lacZzeo.L-3</i>	5'-CGTTGTAAAACGACGGCCAGTGAATCCGTAATCATGGTCATGAGACTTCGGCAAAGTACCCC-3'
	<i>kp1657.lacZzeo.L-5</i>	5'-CCGGCAACTGCGTGCACTTCGTGGCCGAGGAGCAGGACTGAGTCATGAA GAAAGATTTAAAGAG-3'
	<i>kp1657.500-3</i> <i>kp1657.ext-3</i>	5'-CGTATTAGATAAAAATAACCATC-3' 12208.500-3
<i>Δkp1666::lacZzeo</i>	<i>kp1666.ext-5</i>	<i>kp1657.lacZzeo.L-3</i>
	<i>kp1666.500-5</i>	5'-AAAAATTACTATGTTTCCTTGG-3'
	<i>kp1666.lacZzeo.L-3</i>	5'-CGTTGTAAAACGACGGCCAGTGAATCCGTAATCATGGTCATAGTTATTACTCTTTGTAAATTC-3'
	<i>kp1666.lacZzeo.L-5</i>	5'-CCGGCAACTGCGTGCACTTCGTGGCCGAGGAGCAGGACTGAGTTTCGCTCAATGACCGTAATGTTTGTAAATGCGCTTAAAGTTTGC -3'
	<i>kp1666.500-3</i> <i>kp1666.ext-3</i>	5'-ACCGGTACCGATAAAGTTAAAACC-3' 1040.kmGB.L-5
<i>Δkp1680::lacZzeo</i>	<i>kp1680.ext-5</i>	9291.ext-5
	<i>kp1680.500-5</i>	5'-GGGCTGCGCGGAATATAGTCGC-3'
	<i>kp1680.lacZzeo.L-3</i>	5'- ACCCGGCCGCAACTGCGTGCACTTCGTGGCCGAGGAGCAGGACTGAAAATTATTTTTGCTACTGAGCCAA -3'
	<i>kp1680.lacZzeo.L-5</i>	5'-CACGACGTTGTAAAACGACGGCCAGTGAATCCGTAATCATGGTCATAATCTCCTTATTTATTTTTCGTTAG-3'
	<i>kp1680.500-3</i> <i>kp1680.ext-3</i>	5'-GCCATGAACTCACCTGGCTTGG-3' 9291.ext-3
<u>Cassette verifications</u>		
<i>KmGB</i>	<i>KmGB.verif-5</i>	5'-TGGCTCCCTCACTTTCTGGC-3'
	<i>KmGB.verif-3</i>	5'-ATATGGCTCATAACACCCCTTG-3'
<i>spec</i>	<i>spec.verif-5</i>	5'-CCGATACTCTGAAGCTATGGAAGTC-3'
	<i>spec.verif-3</i>	5'-CGTACAAATGCACGGCCAGCAAC-3'
<i>cat</i>	<i>cat.verif-5</i>	5'-TACGCAAGGCGACAAGGTGC-3'
	<i>cat.verif-3</i>	5'-GTACATTGAGCAACTGACTG-3'
<i>apra</i>	<i>apra.verif-5</i>	5'-GAATGTGTCTCAGAGACAACCTCAAGG-3'
	<i>apra.verif-3</i>	5'-GGGACACGATGCCAACACGACGCTG-3'
<i>lacZzeo</i>	<i>lacZatg-100-3</i>	5'-GGGGGATGTGCTGCAAGGCGATTAA-3'
	<i>zeo.verif-5</i>	5'-CAGGTGGTGCCGACAACACC-3'
<u>Kps verifications</u>		
<i>Kps</i>	<i>kpsIf</i>	5' -GCGCATTGCTGATACTGTTG-3'
	<i>kpsK2r</i>	5' -AGGTAGTTCAGACTCACACCT-3'
