

Table S1. *Escherichia coli* strains.

Strain	Relevant genotypes	Source
AT3327	wild type	laboratory strain
CAG5052	<i>metB1 btuB3191::Tn10</i>	CGSC <sup>a</sup>
DB1318	<i>recA938::Tn9-200</i>	CGSC [1]
DY330	W3110 <i>del(lacU)169 gal490 λcI857 del(cro-bioA)</i>	D. L. Court [2]
GTN373	GTN932 <i>priA300 his::Mucls62</i>	This work
GTN381	GTN932 <i>priA300</i>	This work
GTN387	GTN932 <i>priC303::kan</i>	This work
GTN394	GTN932 <i>del(priB)302</i>	This work
GTN412	GTN932 <i>del(priB)302 his::Mucls62 dinD1::Mud1(lac,Ap)</i>	This work
GTN430	GTN412 <i>priA2::kan</i>	This work
GTN522	GTN412 <i>priA2::kan dnaC(g403a)<sup>b</sup></i>	This work
GTN622	GTN932 <i>priA300 clpX::kan his::Mucls62 (GTN373 clpX::kan)</i>	This work
GTN932	<i>del(gpt-lac)5</i>	This work
GTN1050	GTN932 <i>&lt;nusAinfB(wt)cat&gt; del(infB)1::tet</i>	This work
GTN1059	GTN932 <i>&lt;nusAinfB(wt)cat&gt; del(infB)1::tet del(priC)752::kan</i>	This work

GTN1114	GTN932 < <i>nusAinfB(del1)cat</i> > <i>del(infB)1::tet</i>	This work
GTN1115	GTN932 < <i>nusAinfB(del2/3)cat</i> > <i>del(infB)1::tet</i>	This work
GTN1117	GTN932 < <i>nusAinfB(del1)cat</i> > <i>del(infB)1::tet del(priB)302::kan</i>	This work
GTN1119	GTN932 < <i>nusAinfB(del2/3)cat</i> > <i>del(infB)1::tet del(priB)302::kan</i>	This work
GTN1133	GTN932 < <i>nusAinfB(wt)cat</i> > <i>del(infB)1::tet del(priB)302::kan</i>	This work
GTN1135	GTN932 < <i>nusAinfB(del1)cat</i> > <i>del(infB)1::tet del(priC)752::kan</i>	This work
GTN1137	GTN932 < <i>nusAinfB(del2/3)cat</i> > <i>del(infB)1::tet del(priC)752::kan</i>	This work
GTN1154	GTN932 < <i>nusAinfB(wt)cat</i> > <i>del(infB)1::tet del(argA)743::kan</i>	This work
GTN1156	GTN932 < <i>nusAinfB(del1)cat</i> > <i>del(infB)1::tet del(argA)743::kan</i>	This work
GTN1157	GTN932 < <i>nusAinfB(del2/3)cat</i> > <i>del(infB)1::tet del(argA)743::kan</i>	This work
GTN1297	GTN932 <i>priA300</i> < <i>nusAinfB(del2/3)cat</i> > <i>del(infB)1::tet</i>	This work
GTN1298	GTN932 <i>priA300</i> < <i>nusAinfB(wt)cat</i> > <i>del(infB)1::tet</i>	This work
GTN1323	GTN932 <i>priA300</i> < <i>nusAinfB(del1)cat</i> > <i>del(infB)1::tet</i>	This work
GTN1376	GTN932 <i>recA938::Tn9-200</i>	This work
GTN1384	GTN932 <i>priA300 sulA::Mud(lac,Ap,B::Tn9)</i>	This work
GTN1385	GTN932 <i>sulA::Mud(lac,Ap,B::Tn9)</i>	This work
GTN1387	GTN932 < <i>nusAinfB(del1)cat</i> > <i>del(infB)1::tet sulA::Mud(lac,Ap,B::Tn9)</i>	This work
GTN1396	GTN932 <i>priA300 Mud(lac,Ap,B::Tn9)<sup>+</sup> (SulA<sup>+</sup>)</i>	This work

GTN1399	GTN932 < <i>nusA</i> <i>infB</i> ( <i>del1</i> ) <i>cat</i> > <i>del</i> ( <i>infB</i> ) <i>I</i> :: <i>tet</i> Mud( <i>lac</i> , <i>Ap</i> , <i>B</i> :: <i>Tn9</i> ) <sup>+</sup> ( <i>SulA</i> <sup>+</sup> )	This work
GTN1420	GTN932 <i>del</i> ( <i>dnaT</i> ) <i>759</i> :: <i>kan dnaC</i> ( <i>a491t</i> ) <sup>b</sup>	This work
GTN1514	GTN1117 pBAD24- <i>priC</i>	This work
GTN1566	GTN1117 <i>del</i> ( <i>priC</i> ) <i>752</i> :: <i>kan pBAD24-priC</i>	This work
GTN1639	GTN1385 <i>priA2</i> :: <i>kan</i>	This work
PN104	<i>priA2</i> :: <i>kan dinD1</i> ::Mud( <i>lac</i> , <i>Ap</i> )	CGSC [3]
SS97	<i>priA300 sulA</i> ::Mud( <i>lac</i> , <i>Ap</i> , <i>B</i> :: <i>Tn9</i> )	S. Sandler [4]
JC19272	<i>del</i> ( <i>priB</i> ) <i>302 priC303</i> :: <i>kan dnaC809</i>	S. Sandler [5]
JW0456-1	<i>del</i> ( <i>priC</i> ) <i>752</i> :: <i>kan</i>	CGSC [6]
JW2786-1	<i>del</i> ( <i>argA</i> ) <i>743</i> :: <i>kan</i>	CGSC [6]
JW4336-2	<i>del</i> ( <i>dnaT</i> ) <i>759</i> :: <i>kan dnaC</i> ( <i>a491t</i> ) <sup>b</sup>	CGSC [6]

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<sup>a</sup>The Coli Genetic Stock Center, Yale University

<sup>b</sup>The nucleotide replacement in the *dnaC* ORF is indicated.

## References

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