

## **SUPPLEMENTARY MATERIAL**

### **Glutamate Dehydrogenase Affects Resistance to Cell Wall Antibiotics in *Bacillus subtilis***

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**TABLE S1. Sequences of primers used in this study**

Primer no.	Name	Oligonucleotide sequence, 5'→3' <sup>a</sup>
5012	rocG up-fwd	TCGCGAATTATGAAAAAGCG
5013	rocG up-rev (spec)	<b>CGTTACGTTATTAGCGAGCCAGTCTCTTCATCTTTCGAGACTTGCTT</b>
5046	rocG do-fwd (spec)	<b>CAATAAACCCCTTGCCCTCGCTACGATCAAACAGCGGCAACACAT</b>
5047	rocG do-rev	GCGCGCGTAGAACTCTAAAA
5387	gudB up-fwd	TTAACCCCTCGATGATTTGACAGA
5388	gudB up-rev (kan)	<b>CCTATCACCTCAAATGGTTCGCTGGTTTGTCCTCTTCTGTATGACCG</b>
5389	gudB do-fwd (kan)	<b>CGAGCGCCTACGAGGAATTTGTATCGCGGTGGCGTAACAGTTTCTT</b>
5390	gudB do-rev	ACTTTCGGCAAATCCTCACC
5391	gudB-seq F	CGGTAATGCCGTAGAAACGA
5392	gudB-seq R	CCAGCAGCTCTTGGTTGGTA
5395	rocG Pspac-F	<b>CC<u>AGCTT</u>CATTACAGCCGGCCAAAAA</b>
5396	rocG Pspac-R	<b>GCT<u>CTAGA</u>TGCGGAGGCTTCTCAAATTA</b>
5403	yqeZ qRT-F	ATTGTTGATGGCCAAGGCAATGCCGCT
5404	yqeZ qRT-R	TGGGTACGCCATTGCGAGCGCATATTT
5411	yuaF qRT-F	TCTGTCAAGCTTGCTGATTGCGCT
5412	yuaF qRT-R	TGACCACTTACCAAACCCGTCAA
4368	23S-RT-F	AAAGGCACAAGGGAGCTTGACTGCGAGA
4369	23S-RT-R	ATGAGCCGACATCGAGGTGCCAAACCT
5413	yuaF up-fwd	TCAGCGAAAAGTCAAACGAAA
5414	yuaF up-rev (mls)	<b>GAGGGTTGCCAGAGTTAAAGGATCCCCGCAATAATAAGCGTATAAA G</b>
5415	yuaG do-fwd (mls)	<b>CGATTATGTCCTTTTGCGCAGTCGGCGTAAGGAAAGGGCAGAACCG</b>
5416	yuaG do-rev	TCAGGAGCTGTGTTTTTCGG
5417	yuaG up-fwd	CTTTCCCGAGGTGTCTCGT
5418	yuaG up-rev (mls)	<b>GAGGGTTGCCAGAGTTAAAGGATCATTAAACGCTTCATCAGGCC</b>
5419	yuaI up-fwd	CCAGCAAGTCACAGAGCAGG
5420	yuaI up-rev (mls)	<b>GAGGGTTGCCAGAGTTAAAGGATCTTCGTGGTATGTTGTCCTCCA</b>
5421	yuaI do-fwd (mls)	<b>CGATTATGTCCTTTTGCGCAGTCGGCGAAATTGCCGAGTAAGGCT</b>
5422	yuaI do-rev	CTTTTCTCATCCTTCCGCGT
5561	yuaFG Pspac-F	GCGCCCCGGGTGCATTGATGAAGAAAGGATGA
5563	yuaFG Pspac-R	GCGCT <u>CTAGA</u> ACCATAACGGTTCTGCCCTTT

<sup>a</sup> Restriction sites are underlined, and the sequences complementary to antibiotic resistance cassettes for LFH PCR are in boldface.

**FIG. S1. Isolation of *gudB* gain-of-function mutants.** The *rocG* mutant cells were streaked on LB or DSM agar plates, incubated overnight at 37 °C, and the plates were then kept at room temperature for 3 weeks. The gain-of-function mutations in *gudB* (*gudB*<sup>+</sup>) were confirmed by DNA sequencing.

