

**Supplemental Table 1. AbrB does not repress *sinI***

Genotype <sup>a</sup>	<i>P<sub>sinI</sub>-lacZ</i> activity (MU) <sup>b</sup>
Wild type	5.8 ± 0.4
<i>epsH</i>	7 ± 2
<i>abrB epsH</i>	3.8 ± 0.1

a. The following *P<sub>sinI</sub>-lacZ* containing strains were used FC149, FC321, FC346.

b. β-Galactosidase activity, calculated in Miller Units (MU), was measured from late-exponential phase cells grown in MSgg and is the average of at least three replicates.

**Table S2. Strains<sup>a</sup>**

Strain	Genotype	
3610	Undomesticated wild strain	
FC13	<i>ΔepsH::tet; amyE::P<sub>eps</sub>-lacZ</i> (cat)	Kearns et al., 2005
FC14	<i>ΔsinR::spec; ΔepsH::tet; amyE::P<sub>eps</sub>-lacZ</i> (cat)	Kearns et al., 2005
FC26	<i>Δslr::tet</i>	
FC37	<i>Δslr::tet; ΔsinR::spec</i>	
FC134	<i>ΔepsH::tet; amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	Chu et al., 2006
FC135	<i>ΔsinR::spec; ΔepsH::tet; amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	Chu et al., 2006
FC149	<i>amyE::P<sub>sinI</sub>-lacZ</i> (cat)	
FC171	<i>ΔsipW::tet</i>	Chu et al., 2006
FC280	<i>ΔabrB::kan</i>	
FC315	<i>ΔyooA::tet</i>	
FC321	<i>ΔepsH::tet; amyE::P<sub>sinI</sub>-lacZ</i> (cat)	
FC346	<i>ΔepsH::tet; ΔabrB::kan; amyE::P<sub>sinI</sub>-lacZ</i> (cat)	
FC413	<i>Δspo0A::spec; amyE::P<sub>eps</sub>-lacZ</i> (cat)	
FC414	<i>Δspo0A::spec; amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	
FC415	<i>ΔepsH::tet; ΔabrB::kan; amyE::P<sub>eps</sub>-lacZ</i> (cat)	
FC416	<i>ΔepsH::tet; ΔabrB::kan; amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	
FC444	<i>ΔepsH::tet; Δspo0A::spec; ΔabrB::kan; amyE::P<sub>eps</sub>-lacZ</i> (cat)	
FC445	<i>ΔepsH::tet; Δspo0A::spec; ΔabrB::kan; amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	
FC480	<i>ΔepsH::tet; ΔsinR::spec; ΔabrB::kan; amyE::P<sub>eps</sub>-lacZ</i> (cat)	
FC481	<i>ΔepsH::tet; ΔsinR::spec; ΔabrB::kan; amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	
FC488	<i>amyE::-112 P<sub>yqxM</sub>-lacZ</i> (cat)	
FC495	<i>amyE::-64 P<sub>yqxM</sub>-lacZ</i> (cat)	
FC503	<i>Δslr::tet; ΔabrB::kan</i>	
FC504	<i>Δslr::tet; ΔabrB::kan; amyE::P<sub>yqxM</sub>-lacZ</i> (spec)	
FC513	<i>Δslr::tet; ΔabrB::kan; amyE::P<sub>eps</sub>-lacZ</i> (cat)	

FC518	<i>amyE::P<sub>slr</sub>-lacZ</i> (cat)	
FC519	$\Delta$ <i>epsH::tet</i> ; <i>amyE::P<sub>slr</sub>-lacZ</i> (cat)	
FC520	$\Delta$ <i>epsH::tet</i> ; $\Delta$ <i>sinR::spec</i> ; <i>amyE::P<sub>slr</sub>-lacZ</i> (cat)	
FC522	$\Delta$ <i>epsH::tet</i> ; $\Delta$ <i>abrB::kan</i> ; <i>amyE::P<sub>slr</sub>-lacZ</i> (cat)	
FC525	$\Delta$ <i>slr::mIs</i>	
FC526	$\Delta$ <i>epsH::tet</i> ; $\Delta$ <i>slr::mIs</i> ; <i>amyE::P<sub>eps</sub>-lacZ</i> (cat)	
FC527	$\Delta$ <i>epsH::tet</i> ; $\Delta$ <i>sinR::spec</i> ; $\Delta$ <i>slr::mIs</i> ; <i>amyE::P<sub>eps</sub>-lacZ</i> (cat)	
FC529	$\Delta$ <i>epsH::tet</i> ; $\Delta$ <i>sinR::spec</i> ; $\Delta$ <i>slr::mIs</i> ; <i>amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	
FC536	$\Delta$ <i>slr::mIs</i> ; <i>amyE::P<sub>slr-slr</sub></i> (cat)	
FC591	<i>amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	Chu et al., 2006
FC593	$\Delta$ <i>slr::mIs</i> ; <i>amyE::P<sub>yqxM</sub>-lacZ</i> (cat)	
FC600	$\Delta$ <i>slr::mIs</i> ; <i>yqxM</i> $\Omega$ P <sub>IPTG</sub> - <i>yqxM-sipW-tasA</i> (spec)	
ALM16	<i>amyE::-100 P<sub>yqxM</sub>-lacZ</i> (cat)	
ALM35	<i>amyE::5'</i> site mutation P <sub><i>yqxM</i></sub> - <i>lacZ</i> (cat)	
ALM36	<i>amyE::3'</i> site mutation P <sub><i>yqxM</i></sub> - <i>lacZ</i> (cat)	
ALM37	<i>amyE::heptad repeat mutation P<sub>yqxM</sub>-lacZ</i> (cat)	
DS1674	$\Delta$ <i>epsH::tet</i> ; $\Delta$ <i>sinR::kan</i>	

a. All strains are derivatives of 3610

**Table S3.** Primers<sup>a</sup>

Primer	Sequence (5' → 3')
-499sinI	tggcGAATTCagttttcactgacgtctcaaatatgt
-2sinI	gccaGGATCCagtttctctcctaaaatactgttta
Slr1F	tttgcattgatcatcgagaaaatgca
Slr2R	caattcgcctatagtgagtcgtacggtagcaaacggataattcttcca
Slr2_tetR	gaacaacctgcaccattgcaagaacggtagcaaacggataattcttcca
Slr3F	ccagcttttgtcccttttagtgagtgctgtccatgaagtcaaatcctt
Slr3_tetF	ttgatcctttttataacaggaattctgtctgtccatgaagtcaaatcctt
Slr4R	aattaatagcggaaataaccggaagca
slrcomp_F	cgcGGATCCgtattcatagccttcagcctt
slrcomp_R	ccgGAATTCaacgttagcccttaaccgatca
yoaW1_F	agaacaagggcataagaatagaatca
yoaWP2_R	caattcgcctatagtgagtcgttaaaagtaaacatcaacatcttttcaa
yoaWP3_F	ccagcttttgtcccttttagtgagacggtttcagtttgatcagccaga
yoaW4_R	ttgcgatgaaagtaggaattcatga
Pslr-F1	gtcGAATTCtagacaatcgatataattctttg
Pslr-R1	gtcGGATCCtagaaattctctctattctctgtg
+1slr	gttcCATATGattggaagaattatccgttgtac
+339slr	aggcCTCGAGgtaagaggcagtttcaggctgtt
-302yqxM	tggcGAATTCatagacaaatcacacattgtttgatca
-26yqxM	gccaGGATCCatcttacctctgtaaaacactgtaa
-175yqxM	gttcGAATTCtagcaatactgagcaagactttgt

-160yqxM	gttcGAATTCagcaagactttgtaatatgatga
-126yqxM	gttcGAATTCaacgaacaaaatgagcgatttcggt
-270yqxM	tggcGAATTCgtcaccctttctttgtttattattac
+14yqxM	gccaGGATCCaacaatcgaaacatatcttacctcct
-21yqxM_R	gccaGGATCCtgaacttgatgatgacaatcgttctc
-244yqxM_F	gttcGAATTCaccaaataataatgggatatgcatttaa
ALM1	gttcCTCGAG agactttgtaatatgatgaaaacattct
ALM2	gttcCTCGAGgtatgaagtgtttttcaattttttagaaattttggga
ALM3	gttcCTCGAGgtattgctcattttttcaattttttagaaatt
ALM4	gttcCTCGAGatactgagcaagactttgtaatatgat
ALM5	gttcCTCGAGttttttcaattttttagaaattttggga
ECH318	ggGGAATTCatatgtttatgaaatctactggtattgta
ECH336	accgCTCGAGtcatttaaggttttgaagctggttttggga
ECH341	aaactcactggcagcgatatcg
ECH342	tctatttgttaagagccatatctaag
ECH343	cggttatacaaggattcatcgagc
ECH344	caattgtgcgccggtcacttcat
-246epsA	gttcGAATTCtaatatgaaattctcctctattcctgt
+4epsA	gccaGGATCCtcatgtattcatagccttcagcctt
JSK362	ggcAAGCTTacataaggaggaactactatgagtaaaggagaagaactttcac
JSK445	ggcGGATCCtattttgatagttcatccatgccatg

<sup>a</sup>Capital letters designate restriction enzyme sites added to the primers

### Supplementary Figure legends

**Figure S1. Effects of AbrB-regulated genes on biofilm formation.** ‘Colony’ column depicts 16 X images of colonies grown on MSgg semi-solid agar medium for 3 days at 22°C. Scale bar is 1 mm. ‘Pellicle’ column depicts top-down images of 6-well microtitre plates in which cells have been grown statically in MSgg medium for 3 days at 22°C. Scale bar is 1 cm. The indicated wild type and mutant strains were as follows: wild type (3610), *sipW* (FC171), and *yoaW* (FC315).

**Figure S2: Antibodies generated to SinR cross-react with Slr.** Western blot using  $\alpha$ -SinR as primary antibody. Whole cell lysates of the strains were loaded as follows: wild

type (3610); *slr* (FC26); *sinR slr* (FC37); *sinR* (DS1674). Lanes were loaded and normalized to 0.1 OD600 cell equivalents.

**Figure S3. A *sinR* mutation, but not an *abrB* mutation, is partially epistatic to the effects of an *slr* mutation.** A) ‘Colony’ column depicts 16 X images of colonies grown on MSgg semi-solid agar medium for 3 days at 22°C. Scale bar is 1 mm. ‘Pellicle’ column shows top-down images of 6-well microtitre plates in which cells have been grown statically in MSgg medium for 3 days at 22°C. Scale bar is 1 cm. The indicated wild type and mutant strains were as follows: wild type (3610), *sinR slr* (FC37), *abrB slr* (FC503). B,C) The indicated strains were grown at 30°C in MSgg and β-galactosidase was measured in Miller Units. B) β-galactosidase expression of  $P_{eps}$ -*lacZ* in wild type (◆)(FC13), *slr* (■) (FC526), *sinR* (▲)(FC14), *abrB* (□)(FC415), *sinR slr* (X)(FC527), *abrB slr* (○)(FC513). C) β-galactosidase expression of  $P_{yqxM}$ -*lacZ* in wild type (◆) (FC134), *slr* (■) (FC528), *sinR* (▲)(FC135), *abrB* (□)(FC416), *sinR slr* (X)(FC529), *abrB slr* (○)(FC504) .

**Figure S4. Slr is a DNA-binding protein.** EMSA in which radiolabeled DNA’s (denoted below each panel) were mixed with purified N-terminal Slr at the indicated concentrations. Sizes of the DNA fragments containing *gfp* and  $P_{yqxM}$ , were 741 and 284 base pairs, respectively. The horizontal arrow indicates the position of free probe.

Figure S1

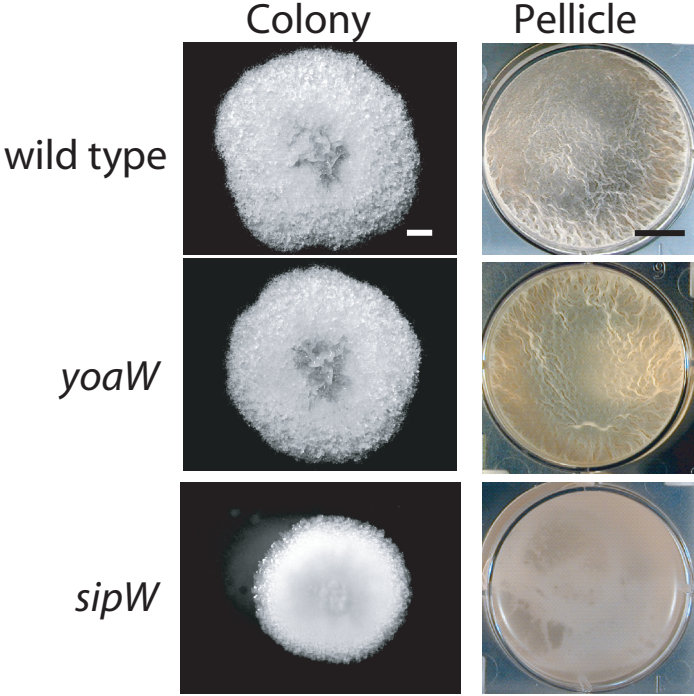


Figure S2

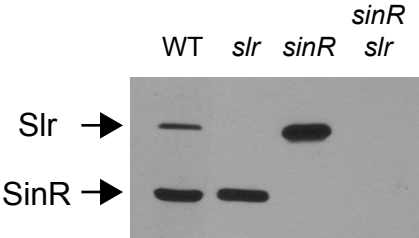


Figure S3

A

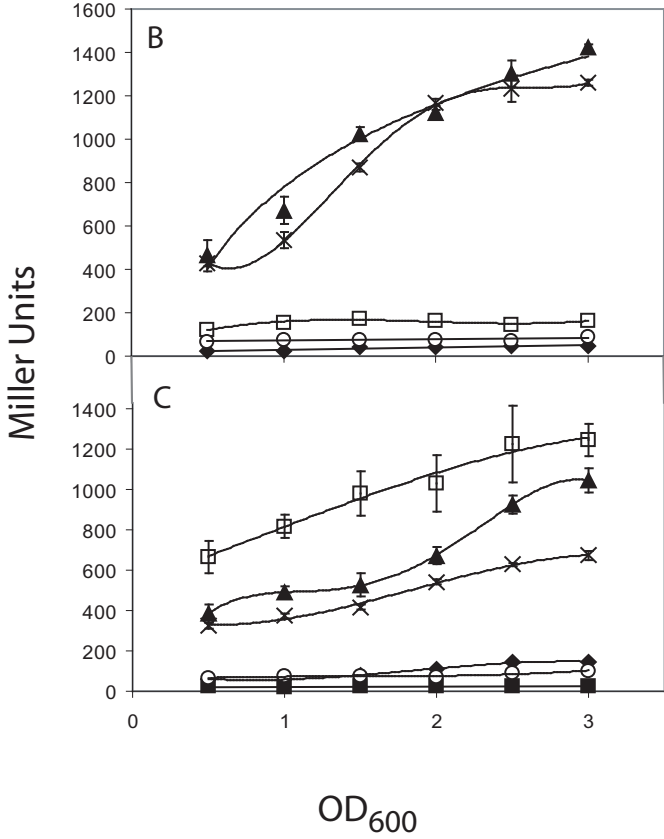
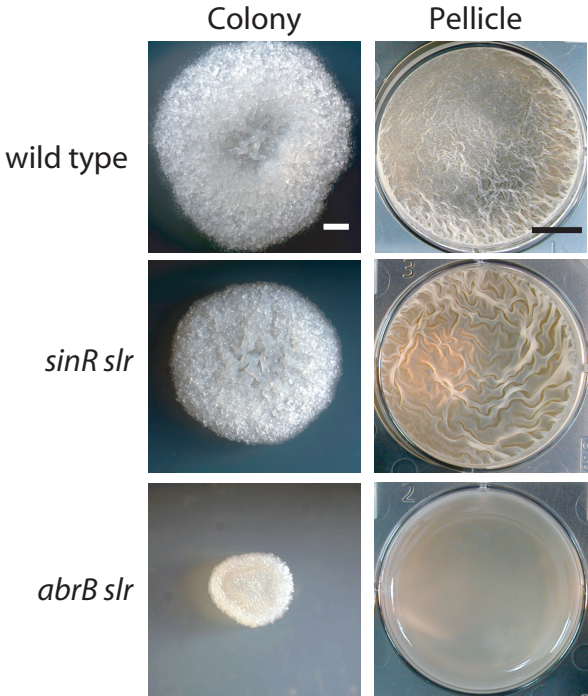


Figure S4

