

Different *csrA* Expression Levels in C versus K-12 *E. coli* Strains Affect Biofilm Formation and Impact the Regulatory Mechanism Presided by the CsrB and CsrC Small RNAs

This file contains:

Table S1. Oligonucleotides

Figure S1. Growth curves of *csrA* mutants

Figure S2. Activity of the *pgaABCD* operon promoter

Figure S3. Transcription of *csrA* locus in *csrA::kan* mutants and characterization of CsrB sRNA

Table S1. Oligonucleotides

Name	Sequence
FG2524	AGCGCCTTGTAAAGACTTCGCGAAAAAGACGATTCTATCTTCGTCGACAGGTGTTAGGC TGGAGCTGCTTCG
FG2525	AGGGAGCACTGTATTCACAGCGCTCCCGGTTCTCGCAGCATTCCAGCATTCCGGG GATCCGTGACCC
FG2530	CGTTGTCTGACTCCCTGTCGAC
FG2531	GCTCCCTGCTCATCCTTGACAACCTT
FG2568	CCGGACGTTTGTCTTCCTG
FG2585	AAAATGTCAAATACTGATGGCGTTGATTGTTGTTAAAGCAAAGGCGTGTGTTAG GCTGGAGCTGCTT
FG2586	TGC GGCGGAATCTAACAGAAAGCAAGCAAAGAAAAAGGCCACAGATTAACATAT GAATATCCTCCTTAG
FG2624	CGGGATACAGAGAGACCCGACTCTTTAATCTTCAAGGAGCAAAGAATGATTCCGG GGATCCGTGACCC
FG2625	CTCACCGATAAAGATGAGACGCGGAAAGATTAGTAACGGACTGCTGGATGTAGG CTGGAGCTGCTTCG
FG2647	CTAATACGACTCACTATAGGGCGCCAATACGTACCTGGTTG
FG2753	ATGCGATATCCTACTTCGCGGCTACGACC
FG3151	CGAAAGCTTAATCTTCAAGGAGGAAAG
FG3152	CGTGGATCCCGTCTCACCGATAAAGATG
PL101	TGTCGTCAAGCTCGTGTGTA
PL102	ATCCCCACCTCCTCCGGT
PL191	ATGCTGATTCTGACTCGTCGAG
PL208	GGGAGTCAGACAACGAAGTG

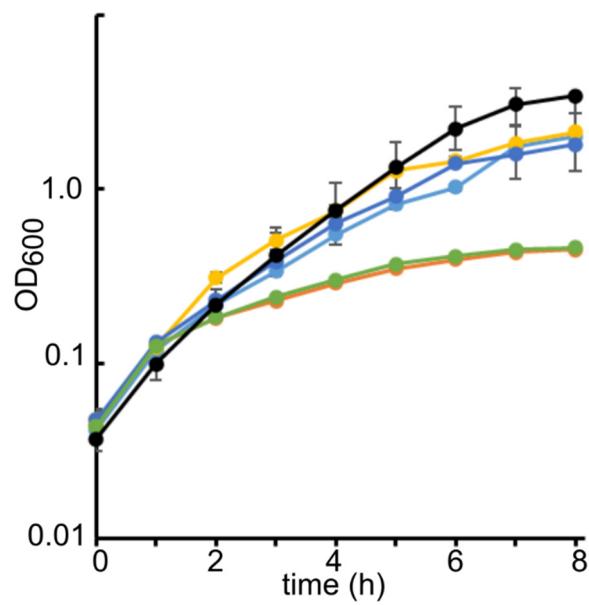


Figure S1. Growth curves of *csrA* mutants. Growth at 37 °C in M9-LG monitored by measuring the OD₆₀₀ of cultures of the strains indicated in the Figure. *E. coli* C: *csrA*⁺, C-1a (black curve); Δ *csrA*, C-5939 (light blue curve); *csrA*:*kan*, C-5741 (green, orange and blue curves); *E. coli* K-12: MG1655 *csrA*:*kan* (yellow curve). Three C-5741 independent cultures were analysed in this experiment.

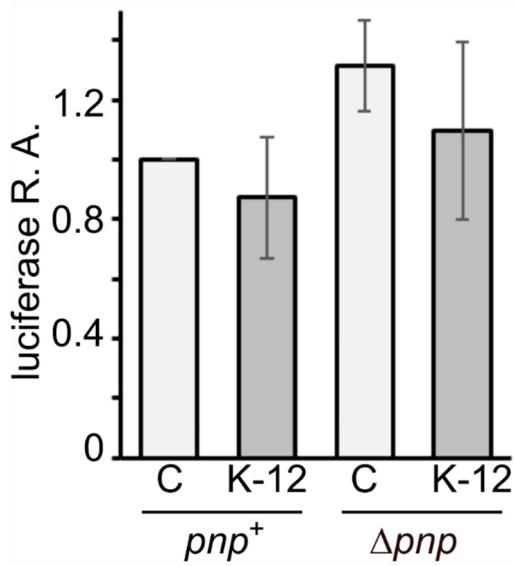


Figure S2. Activity of the *pgaABCD* operon promoter. Luciferase relative activity (R.A.) with respect to *E. coli* C wt strain. Results are the average of three determinations on independent cultures of the strains: *E. coli* C C-1a (pnp^+), C-5691 (Δpnp); *E. coli* K-12 MG1655 (pnp^+), KG-211 (Δpnp). All strains carried plasmid p Δ L pga , which carries the *pgaABCD* promoter upstream of the luciferase gene [23]. Differences in luciferase R.A with respect to the C-1a are not statistically significative according to t-test.

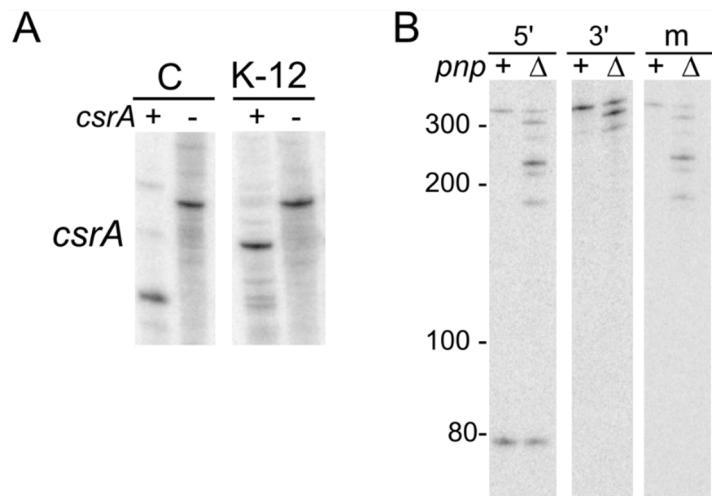


Figure S3. Transcription of *csrA* locus in *csrA::kan* mutants and characterization of CsrB sRNA. Northern blotting of RNA extracted from cultures grown in M9-LG to $OD_{600} = 0.8$ at $37^\circ C$. RNA samples ($10 \mu g$) were loaded on 6% polyacrylamide-urea gel, blotted onto a nylon membrane, and hybridized with the CSRA riboprobe (A) or radiolabelled oligonucleotides specific for different regions of the CsrB sRNA (FG2530, CsrB 5'-end; FG2531, CsrB 3'-end; PL208, CsrB internal region, m). (B). A. RNA extracted from cultures of *E. coli* C C-1a (+, *csrA*⁺), C-5741 (-, *csrA::kan*), and *E. coli* K-12 MG1655 (+, *csrA*⁺) and its isogenic *csrA::kan* mutant (-). B. RNA extracted from cultures of C-1a (+, *pnp*⁺) and C-5691 (Δ , Δpnp), KG-294 ($\Delta csrA$ *pnp*⁺). The position and MW (in nt) of bands of the Low-range ssRNA ladder (NEB) is reported on the left.