

**Table S1.  $\beta$ -galactosidase activities measured in this study.** Shown in this table are the average and the standard deviation of at least two (Fig. 2, 5A, 5B, 6B and 6C) or three (Fig. 3, 4 and 6A) independent experiments. For Fig. 4E and 5C, a single representative experiment done with two duplicate samples is shown. Measurements were done on cells grown to exponential phase ( $A_{600}$  of about 0.4) in rich medium (LB (Fig. 2A, 2B, 6A and 6C), LB + ampicillin (Fig. 4E, *rybB-lacZ* fusion), LB + 0.02% arabinose (Fig. 4D and 6B), LB + ampicillin + IPTG 100  $\mu$ M (Fig. 2C, 3, 5A and 5B), LB + ampicillin + IPTG 100  $\mu$ M + 0.02% arabinose (Fig. 4B), LB + ampicillin + 0.02% arabinose (Fig. 4E,  $P_{BAD}$ -*phoP-lacZ* fusion) or LB + ampicillin + IPTG 100  $\mu$ M + 0.004% arabinose (Fig. 5C)).

**Table S2. Oligonucleotides used in this study**