



**Fig. S2.** Construction of pWAS2 plasmid expressing an SgrS-based synthetic sRNA targeting DsRed2. (A) Sequence context of the *DsRed2* target region. The SD sequence is shown in blue, the start codon (ATG) in green, and the region targeted by the anti-DsRed2 synthetic sRNA in red. (B) Primers used for constructing the anti-DsRed2 synthetic sRNA by site-directed mutagenesis PCR. The primers, anti-DsRed2-F and anti-DsRed2-R (yellow background), introduce a 20-bp target-binding sequence colored in red (reverse complementary to the *DsRed2* mRNA). The annealing sequence to SgrS scaffold is colored in green and that to the  $P_R$  promoter is colored in black.