

**Fig S1.** LexA-Sir4<sup>PAD</sup>, -Yku80, and -Yif1 fusions do not induce transcriptional silencing at the *ARS607* locus. Transcriptional silencing near the *lexA* operators was examined in a *ppr1*Δ background. The *URA3* gene was inserted between the *lexA* operators and *ARS607*, and the effect of expressing various LexA fusions on the expression of *URA3* was examined. A LexA-Sir2 fusion, which can induce transcriptional repression of a crippled silencer (Taddei et al., 2004), causes weak silencing. (A) Insertion oriented with *URA3* promoter proximal to lexA operators. The distance between LexA<sup>OP</sup> and *URA3* promoter is 0.24 kb, and the distance between LexA<sup>OP</sup> and *ARS607* is 1.6 kb. (B) Insertion oriented with *URA3* promoter distal to *lexA* operators. The distance between LexA<sup>OP</sup> and *URA3* promoter is 1.1 kb, and the distance between LexA<sup>OP</sup> and *ARS607* is 1.6 kb.