

**Figure 6. FleQ binds c-di-GMP *in vitro*.** A) Binding of radiolabeled c-di-GMP by FleQ truncated FleQ, WspR (positive control), QscR (negative control), and no protein control. All reactions contained 20  $\mu\text{M}$  [ $^{32}\text{P}$ ]-c-di-GMP. Data are presented as cpm retained on the nitrocellulose filter. B) Concentration dependent binding of [ $^{32}\text{P}$ ]-c-di-GMP by FleQ (squares) and truncated FleQ (triangles). All data are the average of at least three independent binding reactions. Error bars represent the standard deviations between replicates.

**Figure 7. Model for the regulation of gene expression by FleQ, FleN, and c-di-GMP.** A) FleQ in the absence of FleN or c-di-GMP maximally represses *pel* transcription. B) The situation in wild-type cells; FleQ binding at the *pelA* promoter is reduced by FleN and ATP/ADP, resulting in less *pel* repression than the situation in panel A. C) C-di-GMP binds to FleQ to cause it to dissociate from DNA thereby causing derepression of transcription from the *pel* promoter.

**Supplementary Figure 1. Binding of FleQ, FleN, and truncated FleQ to the *fleSR* promoter in the presence and absence of c-di-GMP.** A) Binding of FleQ and FleN to the *fleSR* promoter in the presence of ATP, B) Binding of FleQ and FleN to the *fleSR* promoter in the presence and absence of c-di-GMP, C) Binding of truncated FleQ to the *fleSR* promoter. All reactions contained 10  $\mu\text{M}$  ATP.