

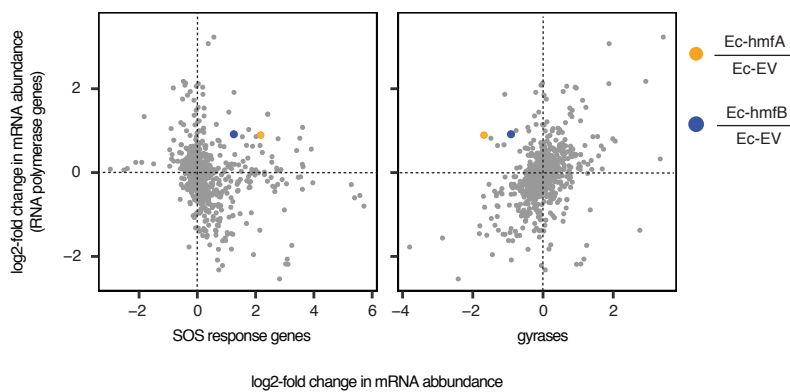
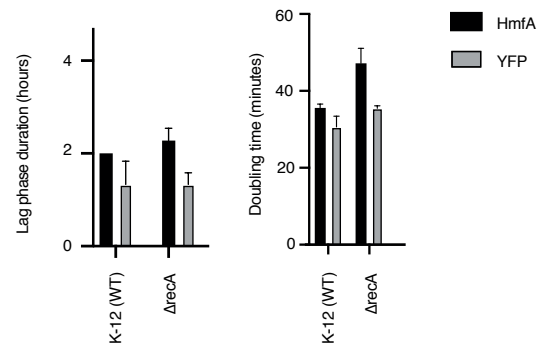
A**B**

Figure 7 - figure supplement 1. The impact of archaeal histones on transcription in *E. coli*. **A.** Upregulation of SOS response genes (*dinB*, *dinD*, *sulA*, *recA*, *sbmC*, *recN*), as defined by Khil & Otero (2002), and downregulation of gyrases (*gyrA/B*) in histone-expressing strains. For simplicity, differential regulation is shown as a single mean value across genes. The response is contextualized by considering fold-changes for the same genes in >1000 other perturbations (see main text and Methods). Histone-expressing strains are unusual in showing strong down-regulation of gyrase genes in the face of increased RNA polymerase expression. **B.** Deletion of *recA*, a gene required for the induction of the SOS response, exacerbates slow growth and lag phase extension but is not lethal.