



Fig. S1. Growth conditions for total RNA sampling and base count data replicates. **A**, Wild type *E. coli* BW38028 was grown on MOPS glucose minimal medium in a 2-liter Biostat B fermenter (Braun Biotech) with 1 liter working volume, at 37°C, pH was kept constant at 7.4 by the addition of 1 M NaOH, and dissolved oxygen was maintained above 40% of saturation by adjusting the agitation speeds in the range of 270–500 rpm with fixed 1.5 liter/min air flow. Total RNA was prepared from culture samples taken at 10 time points indicated by red arrows. Replicate samples from duplicate cultures were taken at times indicated by asterisks. **B**, *E. coli* BW39452 ($\Delta rpoS::cat$) grown as described for A. **C**, Normalized transcription unit (TU) usage values from replicate 1 plotted against values from replicate 2 for logarithmic phase samples. **D**, Normalized TU usage values from replicate 1 plotted against values from replicate 2 for stationary phase samples. All annotated TU's (Table S2) are plotted. The trend line is shown as a solid black line. The correlations are $R = 0.97$ for stationary phase samples and $R = 0.96$ for logarithmic phase samples.