



**Figure S5.** Plasmid burden imposed by plasmid R1drd19. *E. coli* BW27783 (Nx' and Rif' mutants) was grown in LB medium at 37 °C in continuous agitation in a multiwell plate reader (Victor3, Perkin Elmer). Cells were inoculated at a starting  $OD_{600} \approx 0.001$  and grown for 14 h. To counteract evaporation, 6  $\mu$ L of sterile distilled water was injected every 21 min in each well.  $OD_{600}$  was monitored every 7 min. Resulting  $OD_{600}$  were background subtracted, transformed to log scale and plotted against time. Linear fitting for the regime of exponential growth ( $OD_{600}$  between 0.01 and 0.2) was employed to determine the maximal growth rate ( $r^2 > 0.98$ ). Growth rate ( $\alpha$ ) was transformed into generation time ( $\tau = \ln(2) / \alpha$ ). The graph shows individual values (open circles) and averages and standard deviations (open boxes and error bars) of 12 growth curves. No significant differences in the generation time of nalidixic acid (Nx', first data set) and rifampicin (Rif', second data set) variants of the strain were observed. The generation time of *E. coli* BW27783 bearing de-repressed IncF plasmid R1drd19 (third data set) was found to be, on average, 7 min higher than the observed doubling time for the plasmid free strain.