



Figure S6. Diminished growth of *E. coli* $\Delta kdulD$ on galacturonate in the presence of carbohydrate-induced osmotic stress. *E. coli* MG1655 (black line) and *E. coli* $\Delta kdulD$ (blue line) were incubated in M9 minimal medium containing 50mM galacturonate (A, D), 50mM galacturonate and 400 mM sucrose (B, E) or 50mM galacturonate and 700 mM sucrose (C, F). A – C, aerobic conditions, n = 6; D – F, anaerobic conditions, n = 5. Cell densities were determined at 600 nm; data are expressed as medians and minima versus maxima.