



**Figure S2. Schematic presentation of the regions deleted on the chromosome of *E. coli*  $\Delta kduD$ .** The expression or function of genes adjacent to the deleted *kduD* genes (*yqeF* and *araE*) should not be affected by the constructed deletions because promoter and coding regions remained unchanged in the mutants. Black arrows indicate start and termination sites of genes, red arrows indicate deleted sequences.