

Figure S3. Schematic presentation of the P-GEM-T constructs carrying *kdul*, *kduD*, or both. Chromosomal regions coding for *kdul*, *kduD*, or both genes including the ribosomal binding sites (RBS) were amplified from *E. coli* MG1655 and cloned into P-GEM-T vectors (A). Black arrows indicate start and termination sites of genes, red arrows indicate chromosomal sequences cloned in pGEM-T vectors. The orientation of genes was validated by sequencing using plasmid specific primers. Gene expression of clones carrying *kdul* and *kduD* (B) was under the control of the lac promoter and therefore inducible by IPTG. Expression of clones carrying *kdul* (C) or *kduD* (D) was controlled by the T7-RNA-polymerase, which is inducible by addition of rhamnose.