Table S2: Growth of *E. coli* MG1655 pSU19 and *E. coli* Δ*kduID* pSU19-*kduID* under aerobic conditions: Complementation of *E. coli* Δ*kduID* with plasmids containing the corresponding genes including physiologically relevant promoters restored wild type like behavior.

| Medium [b] | $OD_{600}$ max. | | Doubling time $t_d$ ($min^{-1}$) | |
|---|---|---|---|---|
| | *E. coli* MG1655 pSU19 | *E. coli* Δ*kduID* pSU19-*kduID* | *E. coli* MG1655 pSU19 | *E. coli* Δ*kduID* pSU19-*kduID* |
| Glucuronate | 3.6 (3.4:3.8) | 4.2 (4.0:4.4) [c] | 89 (75:113) | 82 (80:93) |
| Glucuronate, sucrose [400 mM] | 3.4 (3.0:3.8) | 4.2 (3.8:4.4) [c] | 218 (183:226) | 237 (195:271) |
| Galacturonate | 5.4 (5.3:5.4) | 5.3 (5.2:5.4) | 78 (74:82) | 82 (75:86) |
| galacturonate, sucrose [400 mM] | 4.1 (4.0:4.3) | 5.2 (3.7:6.3) | 122 (115:125) | 134 (94:208) |

[a] Data are expressed as medians and minima versus maxima (n = 6).
[b] Cultures were incubated on M9 minimal medium containing glucuronate or galacturonate [50 mM each] with or without 400 mM sucrose.
[c] Data represent comparisons of the results obtained with *E. coli* MG1655 versus *E. coli* Δ*kduID* that included use of the same medium (Mann-Whitney test; $P < 0.05$).