**Supplementary Table I:** Co-regulated adjacent TU pairs in *E. coli*

| Regulating TFs[a] | TU1 | TU2 | Orientation[b] | Mode of control on TU1[c] | Mode of control on TU2[c] | $r_s$[d] |
|---|---|---|---|---|---|---|
| CRP / caiF | caiTABCDE | fixABCX | Div | P / P | P / P | 0.88 |
| CRP / araC[e] | araBAD | araC | Div | P / D | P / N | 0.88 |
| arcA / betI[e] | betIBA | betT | Div | N / N | N / N | ND[f] |
| cynR[e] | cynR | cynTSX | Div | N | P | 0.67 |
| Fur | fepB | entCEBA-cstA | Div | N | N | 0.75 |
| CRP /nagC[e] | nagBACD | nagE | Div | P / N | P / N | 0.8 |
| CRP / arcA | gltA | sdhCDAB-b0725-sucABCD | Div | P / N | P / N | 0.86 |
| birA | bioA | bioBFCD | Div | N | N | 0.76 |
| csgD[e] / ompR | csgDEFG | csgBA | Div | P / P | P / P | 0.84 |
| FlhDC / fliA | flgAMN | flgBCDEFGHIJK | Div | P / P | P / P | 0.85 |
| CRP /malI[e] | malI | malXY | Div | N / N | D / N | ND[f] |
| FliA | fliC | fliDST | Div | P | P | 0.69 |
| FlhDC / fliA | fliE | fliFGHIJK | Div | P / P | P / P | 0.89 |
| CRP / glpR | glpTQ | glpACB | Div | P / N | P / N | 0.8 |
| dsdC[e] | dsdC | dsdXA | Div | N | P | 0.51 |
| fhlA / ihfAB | hycABCDEFGH | hypABCDE | Div | P / P | P / P | 0.77 |
| CRP / fucR[e] | fucAO | fucPIKUR | Div | P / P | P / P | 0.67 |
| lysR[e] | lysA | lysR | Div | P | N | 0.46 |
| exuR | uxaC | exuT | Div | N | N | 0.48 |
| CRP[e] | yhfA | CRP | Div | D | D | ND[f] |
| asnC[e] | asnC | asnA | Div | N | P | 0.38 |
| ilvY[e] | illvY | ilvC | Div | N | P | -0.08 |
| argR | argE | argCBH | Div | N | N | 0.83 |
| CRP / malT | malEFG | malK-lamB-malM | Div | P / P | P / P | 0.64 |
| lexA | uvrA | Ssb | Div | N | N | 0.38 |
| soxR[e] | soxS | soxR | Div | P | N | 0.57 |
| CRP/melR[e] | melR | melAB | Div | P/N | P/P | 0.91 |
| cpxR[e] | cpxR | cpxP | Div | P | P | 0.04 |
| pspF[e] | pspF | pspABCDE | Div | N | P | 0.38 |
| rhaS[e] | rhaBAD | rhaSR | Div | P | N | 0.77 |
| torR[e] | torR | torCAD | Div | N | P | ND[f] |
| xylR[e] | xylAB | xylFGHR | Div | P | P | 0.29 |
| Rob | ybaO | mdlA | Uni | P | P | 0.43 |
| ihfAB | glnHPQ-ybiO | dps | Uni | P | P | 0.04 |
| appY / arcA | hyaABCDEF | appCBA | Uni | P/P | P/P | ND[f] |
| Fnr/ ihfAB / narL | narK | narGHJI | Uni | P/P/P | P/P/P | 0.89 |
| arcA | fumC | fumA | Uni | N | N | ND[f] |
| fliA | tar | motAB-cheAW | Uni | P | P | 0.75 |
| FlhDC / fliA | fliFGHIJK | fliLMNOPQR | Uni | P/P | P/P | 0.92 |

| | | | | | | |
|---|---|---|---|---|---|---|
| CRP / galS[e] | mglBAC | galS | Uni | P/N | P/N | 0.53 |
| CRP | caiF | caiTABCDE | Con | P | P | 0.25 |
| CRP | nupG | speC | Con | P | N | 0.57 |
| CRP | glpD | glgCAP | Con | P | P | 0.77 |
| rhaS[e] | rhaSR | rhaT | Con | N | P | 0.63 |

[a]If more than one TF regulates the same adjacent TU pair, all common TFs are indicated, separated by '/'
[b]Orientation of TU1 and TU2 relative to each other. Div=divergent, Con=convergent and Uni=unidirectional
[c]P=positive regulation, N=negative regulation, D=dual regulation. If more than one TF regulates the same TU pair the type of regulation is indicated for each of the TFs separated by '/'
[d]Spearman correlation between the expression profiles of TU1 and TU2
[e]Co-regulation in *cis*
[f]Expression data missing