

**Supplementary Table II:** Neighbor regulation in *E. coli*

<i>TF</i>	<i>Regulated adjacent TU</i>	<i>Type of regulation on neighboring TU</i>	<i>Autoregulation</i>	<i>Additional common regulator<sup>a</sup></i>	<i>Regulon size<sup>b</sup></i>	<i>Orientation<sup>c</sup></i>
acrR	acrAB	Negative	-	-	1	Div <sup>e</sup>
araC	araBAD	Dual	Negative	CRP	4	Div <sup>e</sup>
asnC	asnA	Positive	Negative	-	1	Div <sup>e</sup>
betI	betT	Negative	Negative	arcA	1	Div <sup>e</sup>
CRP	yhfA	Dual	Dual	-	78	Div <sup>e</sup>
cpxR	cpxP	Positive	Positive	-	8	Div <sup>e</sup>
csgD	csgBA	Positive	Positive	ompR	1	Div <sup>e</sup>
cynR	cynTSX	Positive	Negative	-	1	Div <sup>e</sup>
dsdC	dsdXA	Positive	Negative	-	1	Div <sup>e</sup>
fucR	fucAO	Positive	Positive	CRP	1	Div <sup>e</sup>
glcC	glcD	Positive	-	-	1	Div <sup>e</sup>
glpR	glpD	Negative	-	-	4	Div <sup>e</sup>
ilvY	ilvC	Positive	Negative	-	1	Div <sup>e</sup>
leuO	leuLABCD	Positive	-	-	2	Div <sup>e</sup>
lysR	lysA	Positive	Negative	-	1	Div <sup>e</sup>
malI	malXY	Negative	Negative	CRP	1	Div <sup>e</sup>
MalT	malPQ	Positive	-	-	5	Div <sup>e</sup>
melR	melba	Positive	Negative	CRP	1	Div <sup>e</sup>
mhpR	mhpA	Positive	-	-	1	Div <sup>e</sup>
nagC	nagE	Negative	Negative	CRP	3	Div <sup>e</sup>
narL	nark	Positive	-	-	13	Div <sup>e</sup>
pspF	pspABCDE	Positive	Negative	-	1	Div <sup>e</sup>
rhaS <sup>d</sup>	rhaBAD	Positive	Positive	-	2	Div <sup>e</sup>
rpiR	rpiB	Negative	-	-	1	Div <sup>e</sup>
rtcR	rtcBA	Negative	-	-	1	Div <sup>e</sup>
soxR	soxS	Positive	Negative	-	1	Div <sup>e</sup>
tdcR	tdcABCDEFG	Positive	-	-	1	Div <sup>e</sup>
torR	torCAD	Positive	Negative	-	1	Div <sup>e</sup>
xylR	xylAB	Positive	Positive	-	1	Div <sup>e</sup>
yiaJ	yiaK	Negative	-	-	1	Div <sup>e</sup>
zraR	zraP	Positive	-	-	1	Div <sup>e</sup>
hcaR	hcaA1A2CBD-yhpA	Positive	-	-	1	Div <sup>e</sup>
adiY	adiA	Positive	-	-	1	Uni <sup>e</sup>
exuR	exuT	Negative	-	-	3	Uni <sup>e</sup>
fhlA	hypABCDE	Positive	-	-	3	Uni <sup>e</sup>
fliA	fliC	Positive	-	-	11	Uni <sup>e</sup>
kdpE	kdpABC	Positive	-	-	1	Uni <sup>e</sup>
rbsR	rbsDACBK	Negative	-	-	1	Uni <sup>e</sup>
xapR	xapAB	Positive	-	-	1	Uni <sup>e</sup>
atoC	atoDAE	Positive	-	-	1	Uni <sup>f</sup>

cadC	cadBA	Positive	-	-	1	Uni <sup>f</sup>
caiF	caiTABCDE	Positive	-	CRP	2	Con <sup>f</sup>
dcuR	dcuB-fumB	Positive	-	-	3	Uni <sup>f</sup>
ebgR	ebgAC	Negative	-	-	1	Uni <sup>f</sup>
Gals	mglBAC	Negative	Negative	CRP	1	Uni <sup>f</sup>
gntR	gntKU	Negative	-	-	3	Uni <sup>f</sup>
lacI	lacZYA	Negative	-	-	1	Uni <sup>f</sup>
rhaS <sup>d</sup>	rhaT	Positive	Negative	-	2	Con <sup>f</sup>
treR	treBC	Negative	-	-	1	Uni <sup>f</sup>
uhpA	uhpT	Positive	-	-	1	Uni <sup>f</sup>

<sup>a</sup>Additional transcription factor that regulates both the TU encoding the TF and its neighboring TU

<sup>b</sup>Number of TUs regulated by TF. Does not include auto-regulations.

<sup>c</sup>Orientation of the TU encoding the TF relative to its regulated neighbor. Div=divergent, Con=convergent and Uni=unidirectional

<sup>d</sup>The TF RhaS appears twice since it regulates both its upstream adjacent TU and its downstream adjacent TU.

<sup>e</sup>Regulated TU is located upstream to the TU encoding the regulating TF

<sup>f</sup>Regulated TU is located downstream to the TU encoding the regulating TF