

Supplementary Table 1. H-NS bound loci on the *E. coli* W3110 genome

Locus tag ^a	Associated gene ^b	Microarray ^c	Note	RNAP ^e	Δhns^f
1	CDS: hokC, 5': nhaA			yes	up
2	CDS: caiF, CDS: caiE, CDS: caiD				up
3	5': caiT, 5': fixA	caiT: -2.27		yes	
4	CDS: yabP, 5': yabQ				up
5	5': leuA, CDS: leuL, CDS: leuO, 5': ilvI	leuO: 8.69		yes	up
6	5'up: yabB			yes	
7	CDS: yadC, CDS: yadK, CDS: yadL, CDS: yadM, CDS: htrE, CDS: yadN: 23.12 ecpD, CDS: yadN		fimbria	yes	up
8	CDS: dgt				
9	CDS: tRNA-Asp, CDS: yafT, CDS: yafU			yes	up
10	5': yafK, CDS: yafQ, CDS: dinJ, 5': yafL				
11	CDS: yafN, CDS: yafO, CDS: yafP, 5': ykfJ				
12	CDS: cri, CDS: phoE		fimbria	yes	
13	5': yagG				
14	CDS: yagK, CDS: yagL, CDS: yagM, CDS: yagN, CDS: intF	yagK: 24.78	phage	yes	up
15	CDS: yagU, CDS: ykgJ				
16	5': yagZ, CDS: ykgK, CDS: ykgL, CDS: ykgM, CDS: eaeH, CDS: b0298, CDS: tra5_5, CDS: ykgA, CDS: ykgB, CDS: ykgI, CDS: ykgC, CDS: ykgD, CDS: ykgE, CDS: ykgF, CDS: ykgG, CDS: b0309, CDS: ykgH	yagY: 8.34, yagX: 2.52, ykgB: 40.86	fimbria	yes	up
17	CDS: yahA, CDS: yahB, CDS: yahC, CDS: yahD, 5': yahE			yes	up
18	CDS: yahL, CDS: yahM, CDS: yahN, CDS: yahO, CDS: prpR			yes	up
19	CDS: lacA, CDS: lacY				
20	5': yaiO, CDS: b0359, CDS: yi21_1, CDS: yi22_1, CDS: b0362, CDS: yaiP, CDS: yaiS, 5': tauA		IS	yes	up
21	5': hemB, CDS: b0370, 5': yaiT			yes	up
22	CDS: yaiV				
23	CDS: yaiB, 5': phoA			yes	up
24	CDS: aroM, CDS: yaiE, CDS: ykiA				
25	5': cyoA	cyoA: 10.2		yes	down
26	5': maa, CDS: hha, CDS: ybaJ	hha: 20.75, ybaJ: 4.14		yes	up
27	CDS: ybbL, 5': ybbM				
28	5': rhsD			yes	
29	CDS: ybbC, CDS: b0499, CDS: ybbD, CDS: b0501			yes	up
30	CDS: hyi, CDS: glxR, CDS: ybbV, CDS: allP, CDS: allB, CDS: ybbY, CDS: glxK, CDS: ylbA, CDS: allC, CDS: allD, 5': fdrA			yes	up
31	CDS: sfmA, CDS: sfmC, CDS: sfmD, CDS: sfmH, CDS: sfmF, CDS: fimZ, CDS: tRNA-Arg, CDS: intD, CDS: b0538, CDS: b0540, CDS: tra5_2, CDS: b0542, CDS: emrE, CDS: ybcK, CDS: ybcL, CDS: ybcM, CDS: ybcN, CDS: ninE, CDS: ybcO, CDS: rus, CDS: ybcQ, CDS: trs5_2, CDS: nmpC, CDS: ybcR, CDS: ybcS, CDS: ybcT, CDS: ybcU, CDS: ybcV, CDS: ybcW, CDS: nohB, CDS: ybcX, CDS: ybcY, CDS: ylcE, CDS: appY, CDS: ompT	ybcL: 3.41, appY: 2.74	phage, fimbria	yes	up
32	5': fepE			yes	up
33	5': ybdN, CDS: ybdO			yes	up
34	5': citC, 5': citA			yes	
35	5': dcuC, CDS: crcA, 5': cspE			yes	up
36	CDS: ybeF			yes	
37	5': ybeQ, CDS: ybeR, CDS: ybeS, CDS: ybeT, 5': ybeU				up
38	5': hscC				
39	5'up: ybfM			yes	
40	CDS: ybfP, CDS: ybfG, CDS: ybfH				up
41	5': speF			yes	
42	CDS: ybfA				up
43	CDS: ybfB, CDS: ybfO, CDS: ybfC, CDS: ybfL, CDS: ybfD, 5': ybgA			yes	up
44	5': ybgQ, CDS: ybgD, CDS: gltA		fimbria	yes	down
45	5': cydA	cydA: 2.45, cydB: 9.26		yes	
46	5': ybhD, CDS: ybhH, CDS: ybhI, 5': ybhJ				up