

0/30/90	0/30	0/90	30/90
cysG	acrA	alsR	betT
dnaG	asnC	aroK	ccmA
dtpB	cof	atpA	chbC
ftsX	cysG	crfC	crp
ftsY	envZ	cyoC	cysG
glyY	fadL	cysG	dtpB
gyrB	fbp	eno	efp
hcaT	fmt	exuR	fabF
idnT	gatA	fecC	fbp
ihfB	gatY	firmA	ftsX
<i>lhr</i>	glyY	firmH	gatZ
mutM	hcaT	focA	gcvA
mutY	hldD	ftsY	gshB
ndk	hyfA	gatZ	hcaT
nfuA	idnT	gnd	lcd
pnp	ihfB	gss	idnT
rbbA	ileT	hcaT	ihfB
rhsB	insG	Hcr	infB
rpsU	kdpB	hokB	melA
rrsA	lpxC	idnT	ompR
rrsE	mlaC	ihfB	paaF
rrsG	mltD	intA	pgaC
secB	nagC	iscX	pgk
spoT	ndk	leuW	pnp
ssrA	nfuA	mutM	prfB
tfaR	nrdD	mutY	priB
thrW	nrdR	nanC	rho
valS	nudF	ogrK	rhsB
yedJ	pepD	oppB	rlmJ
ynaE	pgk	pabC	rpiA
yphG	plsB	pfkA	rplJ
zntA	rhaM	pldA	rplN
zupT	rho	prmB	rpoA
	rhsB	qorB	rrlB
	rpiA	rhsB	rrsA
rpsF	rrsA	speF	
rpsG	rrsG	ssrA	
rpsO	rzpQ	surA	
rrsA	sdsR	tfaR	
rrsC	sodA	thiF	
rrsE	speA	tisB	
rutF	ssrA	tyrS	
sdaA	ssuD	uspA	
ssrA	tolC	uvrA	
tfaR	ycfZ	waaQ	
trmA	ydeN	yaeF	
valS	ydiQ	ybhH	
ydhK	ydjY	ybjL	
yeaW	yejK	yeaC	
yfbT	ygiB	yeaX	
yfcC	yheS	yfeX	
ygfB	yhhJ	yhil	
yhfK	zupT	yjjK	
yidB		ynaE	
yifB		ypdC	
yigA		ypdE	
ynaE		yrbL	
		yrdD	
33	57	53	58

