

# Supporting Information

Lemke et al. 10.1073/pnas.1019383108

Table S1. Operon structure

Promoter	Operon structure	No. of r-protein genes	Total no. of genes
<i>rpsJ</i> (S10)	<i>rpsJ-rplC-rplD-rplW-rplB-rpsS-rplV-rpsC-rplP-rpmC-rpsQ</i>	11	11
<i>rplK</i> (L11-L1)	<i>rplK-rplA</i>	2	2
<i>rplN</i> (spc)	<i>rplN-rplX-rplE-rpsN-rpsH-rplF-rplR-rpsE-rpmD-rplO-secY-rpmJ</i>	11	12
<i>rpsM</i> ( $\alpha$ )	<i>rpsM-rpsK-rpsD-rpoA-rplQ</i>	4	5
<i>rpsL</i> (str)	<i>rpsL-rpsG-fusA-tufA</i>	2	4
<i>rpsA</i> P1 (S1)	<i>rpsA-ihfB</i>	1	2
<i>rpsA</i> P3 (S1)			
<i>rpsP</i> (S16)	<i>rpsP-rimM-trmD-rplS</i>	2	4
<i>rpsT</i> P1 (S20)	<i>rpsT</i>	1	1
<i>rpsT</i> P2 (S20)			
<i>thrS</i>	<i>thrS-infC-rpml-rplT</i>	2	4
<i>infC</i> P1			
<i>infC</i> P2			
<i>rpml</i>			
<i>rpoZ</i> ( $\omega$ )	<i>rpoZ-spoT-trmH-recG</i>	0	4
<i>rplJ</i> ( $\beta\beta'$ )	<i>rplJ-rplL-rpoB-rpoC</i>	2	4
<i>rpsU</i> P2 (S21)	<i>rpsU-dnaG-rpoD</i>	1	3
<i>rrnB</i> P1	<i>rrnB-gltT-rrlB-rrfB</i>	0	4

r-Protein operon structure. The genes proposed to be cotranscribed from the promoters in this study are listed in order. In the case of the *thrS-infC-rpml-rplT* operon, several of the promoters are internal to this operon and are not responsible for transcribing it in its entirety.

**Table S2.** Strains and plasmids used in this work

Strain	Relevant genotype	Promoter- <i>lacZ</i> fusion	Promoter endpoints	Source (Ref.)
VH1000	RLG3499 = MG1655 <i>pyrE</i> <sup>+</sup> <i>lacZ</i> <sup>-</sup> <i>lacI</i> <sup>-</sup>			(1)
RLG4996	VH1000	<i>rrnB</i> P1	-46/+1	(2)
RLG6348	VH1000 <i>dksA</i> ::tet	<i>rrnB</i> P1	-46/+1	(2)
RLG4998	VH1000	<i>lacUV5</i>	-59/+36	(3)
RLG8950	VH1000 <i>dksA</i> ::tet	<i>lacUV5</i>	-59/+36	(4)
RLG8980	VH1000	<i>rpsJ</i> (S10)*	-486/+14	This work
RLG8981	VH1000 <i>dksA</i> ::tet	<i>rpsJ</i> (S10)*	-486/+14	This work
RLG9456	VH1000	<i>rplK</i> (L11-L1)	-100/+9	This work
RLG9468	VH1000 <i>dksA</i> ::tet	<i>rplK</i> (L11-L1)	-100/+9	This work
RLG9458	VH1000	<i>rplN</i> (spc)	-100/+9	This work
RLG9470	VH1000 <i>dksA</i> ::tet	<i>rplN</i> (spc)	-100/+9	This work
RLG9242	VH1000	<i>rpsM</i> ( $\alpha$ )	-100/+9	This work
RLG9243	VH1000 <i>dksA</i> ::tet	<i>rpsM</i> ( $\alpha$ )	-100/+9	This work
RLG9457	VH1000	<i>rpsL</i> (str)	-100/+9	This work
RLG9469	VH1000 <i>dksA</i> ::tet	<i>rpsL</i> (str)	-100/+9	This work
RLG9461	VH1000	<i>rpsA</i> P1 (S1)	-90/+20	This work
RLG9474	VH1000 <i>dksA</i> ::tet	<i>rpsA</i> P1 (S1)	-90/+20	This work
RLG9454	VH1000	<i>rpsA</i> P3 (S1)	-100/+20	This work
RLG9466	VH1000 <i>dksA</i> ::tet	<i>rpsA</i> P3 (S1)	-100/+20	This work
RLG9240	VH1000	<i>rpsP</i> (S16)	-100/+12	This work
RLG9241	VH1000 <i>dksA</i> ::tet	<i>rpsP</i> (S16)	-100/+12	This work
RLG9460	VH1000	<i>rpsT</i> P1 (S20)	-100/+20	This work
RLG9473	VH1000 <i>dksA</i> ::tet	<i>rpsT</i> P1 (S20)	-100/+20	This work
RLG9459	VH1000	<i>rpsT</i> P2 (S20)	-89/+20	This work
RLG9471	VH1000 <i>dksA</i> ::tet	<i>rpsT</i> P2 (S20)	-89/+20	This work
RLG9462	VH1000	<i>thrS</i>	-100/+9	This work
RLG9475	VH1000 <i>dksA</i> ::tet	<i>thrS</i>	-100/+9	This work
RLG9463	VH1000	<i>infC</i> P1	-100/+9	This work
RLG9476	VH1000 <i>dksA</i> ::tet	<i>infC</i> P1	-100/+9	This work
RLG9464	VH1000	<i>infC</i> P2	-100/+9	This work
RLG9477	VH1000 <i>dksA</i> ::tet	<i>infC</i> P2	-100/+9	This work
RLG9455	VH1000	<i>rpmI</i> (L35)	-100/+9	This work
RLG9467	VH1000 <i>dksA</i> ::tet	<i>rpmI</i> (L35)	-100/+9	This work
RLG9491	VH1000	<i>rpoZ</i> ( $\omega$ )	-100/+20	This work
RLG9472	VH1000 <i>dksA</i> ::tet	<i>rpoZ</i> ( $\omega$ )	-100/+20	This work
RLG9492	VH1000	<i>rplJ</i> ( $\beta\beta'$ )	-100/+5	This work
RLG9496	VH1000 <i>dksA</i> ::tet	<i>rplJ</i> ( $\beta\beta'$ )	-100/+5	This work
RLG9495	VH1000	<i>rpsU</i> P2 (S21)	-70/+20	This work
RLG9499	VH1000 <i>dksA</i> ::tet	<i>rpsU</i> P2 (S21)	-70/+20	This work
Plasmid	Description	Promoter endpoints	Source	
pRLG770	Transcription vector			(5)
pRLG8447	pRLG770 containing <i>rpsJ</i> (S10) promoter	-100/+50	This work	
pRLG9223	pRLG770 containing <i>rplK</i> (L11-L1) promoter	-100/+45	This work	
pRLG9225	pRLG770 containing <i>rplN</i> (spc) promoter	-100/+50	This work	
pRLG9222	pRLG770 containing <i>rpsM</i> ( $\alpha$ ) promoter	-100/+50	This work	
pRLG9224	pRLG770 containing <i>rpsL</i> (str) promoter	-100/+50	This work	
pRLG9233	pRLG770 containing <i>rpsA</i> P1 (S1) promoter	-90/+50	This work	
pRLG9235	pRLG770 containing <i>rpsA</i> P3 (S1) promoter	-100/+50	This work	
pRLG9234	pRLG770 containing <i>rpsP</i> (S16) promoter	-100/+3	This work	
pRLG9236	pRLG770 containing <i>rpsT</i> P1 (S20) promoter	-100/+50	This work	
pRLG9237	pRLG770 containing <i>rpsT</i> P2 (S20) promoter	-89/+50	This work	
pRLG9249	pRLG770 containing <i>thrS</i> promoter	-100/+50	This work	
pRLG9450	pRLG770 containing <i>infC</i> P1 promoter	-100/+50	This work	
pRLG9451	pRLG770 containing <i>infC</i> P2 promoter	-100/+50	This work	
pRLG9452	pRLG770 containing <i>rpmI</i> (L35) promoter	-100/+50	This work	
pRLG9480	pRLG770 containing <i>rpoZ</i> ( $\omega$ ) promoter	-100/+50	This work	
pRLG9481	pRLG770 containing <i>rplJ</i> ( $\beta\beta'$ ) promoter	-100/+5	This work	
pRLG9485	pRLG770 containing <i>rpsU</i> P2 promoter	-70/+50	This work	
pMSB1	Cloning vector for lambda recombination			(6)

Strains and plasmids used in this study. The asterisks indicate promoter-*lacZ* fusions that were created by ligation of promoter and lambda arm DNA fragments followed by packaging in vitro rather than by recombination and infection in vivo (Materials and Methods). Promoter endpoints are numbered relative to the +1 transcription start site (known or predicted).

Table S3. Promoter sequences

Ref.	Promoter	Sequence
(7)	<i>tpS/J</i>	GTTCTGAAATGCACTGAGAACAATTGAGATAACCCGAAGGCTTACTTACTAGCAATAACGGCTGGTGTGGTTAAGTATGTTAATGCGGGGGTTGTCGTAGTT
(8)	<i>rp/K</i>	TAGAGCTGGACTTCAGCCAGGTTGAAAAGCCTAACCCAGGGATCAAAGGGCATTAAATCGTTGCAAGGGTGGATTGGAATAACAAATTTCGCCCTTTGT
(9)	<i>tp/N</i>	GTTCTGTAATACAGTAACTCTCTAACTGAAATAACGGCTGAGCCGTTTACCCATATCTTGAAAGCTGTTAATGCGGTGTTAATGCGCCCTCGAT
(10)	<i>tpSM</i>	CGTGTAATTGCACTGAGCCGAGCCGAAAGCTGATTTTTCGCAATTTCCTGCAAAAGTGGGTTGAGCTGGTAGATTAGCCAGCCAACTCTT
(9)	<i>tpSL</i>	TCGTCAAGACTTACGGTTAAGGACCCCAAGCAAGTGGCTGTGATGGCTGATCGCCATGCCATGCTCACAGTGCAGGAGAAAGGGCTTAACTTGTAAACCTTGAGCCGTTTGGCGAGATCAAA
(11)	<i>tpSA P1</i>	TGAAAATTTCTCTGAGCCTCTGGAAAGAACGTTGCGCATGCCATGCCATGCTCACAGTGCAGGAGAAAGGGCTTAACTTGTAAACCTTGAGCCGTTTGGCTGAG
(11)	<i>tpSA P3</i>	ACCGAGGGGTAGGCCACTGGTGGATTGCTTACTGGGATTCACCCCTTAAGCAATTGAGCAAGTGTGAAAAGGGCTTACAAATACGGGGCCAGAAATTGGCTCTCG
(12)	<i>tpSP</i>	GCGCACTCGGCAACAAACTGGTGCACCGCCGTTACAGCAGAGTTAGCAACTGTTGATGCAATTCCGGGAAAAAGTGTGAAATTTCGGGCTTTAATATG
(13)	<i>tpST P1</i>	TCATTGGCATGGCGCAAATCACGGGAAGAAACTGACCGCCGTTGCAATTTCGGGAAAGGTGTATTICACCCCCGAAAGCTGGCATCACTAGTAACGAGT
(13)	<i>tpST P2</i>	CCATCACTAGTAACGAGTGGGGCATTAAACGGCCTTATTCGACAAATACTCCAATGCAAAAGGGCAATTTCCTGGCCTTGAATTGTTCAATA
(14)	<i>thrS</i>	TTAAGCTGGTGTGGTACTCAACAAAGTATGCAAAAGTAAACCGAAAGTAACTCTCCGGAAAGTACAATTGCAACTGCTCAACCGGGT
(14)	<i>infC P1</i>	CCTGCTGGTGAATTACCCAGGTGACCGCAATTCTCTGACTGAGAAACAAATTGCGGATGAAAGTTAACGAGTATCGCTTGTCTGACTATGTCAGACCTTT
(14)	<i>infC P2</i>	GTCTGAATACTGTTAAAGGAAATTGAGCAACTTGCTGGGATTAAATCAAAATGGGGCATTCTGGGAAAGTGAAGAAGATTGGCAAGTGGGTTAAATTCGGCAAGCACCTTG
(14)	<i>rpmI</i>	AGTCTGAAGAGAAAGCTCTGGAGAAAGCAGAAAGGGGGAGTAGACTTGTGAGATCAGCCATAACGCCAACCTGATTTCAGTCAACCTGATTTCAGTCAACCTGTTGAG
(15)	<i>rpOZ</i>	CGGCCGAAAGCTGTGCACTGAGGCCAAAGCAGCTCATGACGCTTAACTAGCAAATGGGGAGACTGAACCTGATTTCAGTCAACCTGTTGAG
(8)	<i>rpU</i>	CCACCACTGGGTGAGGTGAGTTGACAGGCTGGCTGAGCGCTTGTAAACTAATGCCCTTACGTGGGGGGTGAATTGTCTACAATTCTACCCAC
(16)	<i>tpSU P2</i>	CTGGAGAAAAGCCTCTGGTATACTCTCACCCTTATAAAAGTCCCTTCAAAAGGCGCCGGTGTCTACAATGCGCAATTTGAAATAAGCTGG
(3)	<i>lacUV5</i>	CTCACTATTAGGCAACCCAGGTACACTTATGCTGGCTGTATAATTGAGGGATAAACATTACACAGGAAAG
(17)	<i>rrnB P1</i>	TTAAATTCTCTGAGGCCAAATACTCCCTAAATGGCCACCA

Sequences of promoters analyzed in this study. The sequences represent the constructs measured *in vivo*. The downstream endpoints of the constructs used for the *in vitro* experiments was +50 in most cases. The -10, -35, extended -10, and transcription start sites (known or putative) are underlined. The transcription start site for *rpoZ* was mapped by Gentry and Burgess (*rpoZ* 15' promoter)

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