

**Table S1. Primers used for the construction of plasmids used in this study**

Primer	Sequence <sup>a</sup>	Location on the genome <sup>b</sup>
dnaA.f	cg <u>gaattc</u> TTATTACAGATATCACACCG <sup>c</sup>	1215...1234
dnaA.r	gcg <u>ccggg</u> TTTAAGCTGTTCTTTAATTTCTTTTAC	1747...1721
spo0J.f	cg <u>gaattc</u> AGCGTGAAGATTTATCTCCG	4204583...4204603
spo0J.r	gcg <u>ctcgag</u> TGATTCTCGTTCAGACAAAAG	4205088...4205069
1dnaA-HiF	cg <u>caagctt</u> GATCTAGAAACGAGAATTGC	1238...1257
1dnaA-LinkR	tgcatcctctcattcaagTTTAAGCTGTTCTTTAATTTTC	1747...1727
2dnaA-HisF	caccaccatcatcaccatTAGCAGGACCGGGGATCAATC	1748...1768
2dnaA-BaR	gcg <u>ggatcc</u> TCGTCAAATACTGATTTTGG	2251...2232
Linker-12His	cttgaatgagaggatcgcatcaccatcaccatcaccaccatcatcaccat	

<sup>a</sup> Capital and lowercase letters indicate sequences derived from *the B. subtilis* genome and others, respectively.

<sup>b</sup> Numbers refer to the SubtiList database (<http://genolist.pasteur.fr/SubtiList/index.html>).

<sup>c</sup> Underlined sequences represent the recognition sites of restriction enzymes.

**Table S2. Genes up- or downregulated by DnaA**

gene <sup>a</sup>	x1/5 DnaA <sup>b</sup>	x5 DnaA <sup>c</sup>	ratio	function
<b>downregulated</b>				
<i>dnaA</i> ( <i>dnaAN</i> ) <sup>d</sup>	0.65	0.39	0.13	replication
<i>dnaN</i> ( <i>dnaAN</i> ) <sup>d</sup>	0.48	0.18	0.38	replication
<i>ykuN</i> ( <i>ykuNPO</i> )	1.58	0.73	0.46	similar to flavodoxin
<i>ykuO</i> ( <i>ykuNPO</i> )	1.84	0.73	0.40	unknown
<i>ykuP</i> ( <i>ykuNPO</i> )	2.22	0.89	0.40	similar to flavodoxin
<i>dhbA</i> ( <i>dhbACEB</i> )	1.04	0.59	0.57	biosynthesis of siderophore group nonribosomal peptides
<i>ywIC</i>	0.70	0.34	0.49	unknown
<i>yydA</i>	0.70	0.45	0.64	unknown
<i>noc</i> ( <i>thdF/gidA/gidB/noc</i> )	2.78	1.76	0.63	cell division
<i>gidB</i> ( <i>thdF/gidA/gidB/noc</i> )	3.11	1.70	0.55	translation
<i>gidA</i> ( <i>thdF/gidA/gidB/noc</i> )	2.10	1.16	0.55	translation
<i>thdF</i> ( <i>thdF/gidA/gidB/noc</i> )	1.77	1.00	0.56	translation
<b>upregulated</b>				
<i>sda</i> <sup>d</sup>	1.17	3.52	3.00	sporulation
<i>yveL</i> ( <i>yveKL</i> )	0.19	0.56	2.95	similar to capsular polysaccharide biosynthesis protein
<i>yveK</i> ( <i>yveKL</i> )	0.24	0.65	2.71	similar to capsular polysaccharide biosynthesis protein
<i>yvdD</i> ( <i>yvdD&lt;-&gt;yvdC</i> )	1.01	2.88	2.85	unknown
<i>yvdC</i> ( <i>yvdD&lt;-&gt;yvdC</i> )	1.28	3.60	2.81	unknown protein with MazG nucleotide pyrophosphohydrolase domain
<i>rocA</i>	0.34	1.97	5.79	arginine catabolism
<i>rocD</i> ( <i>rocCDE</i> )	0.76	2.06	2.71	arginine and proline metabolism

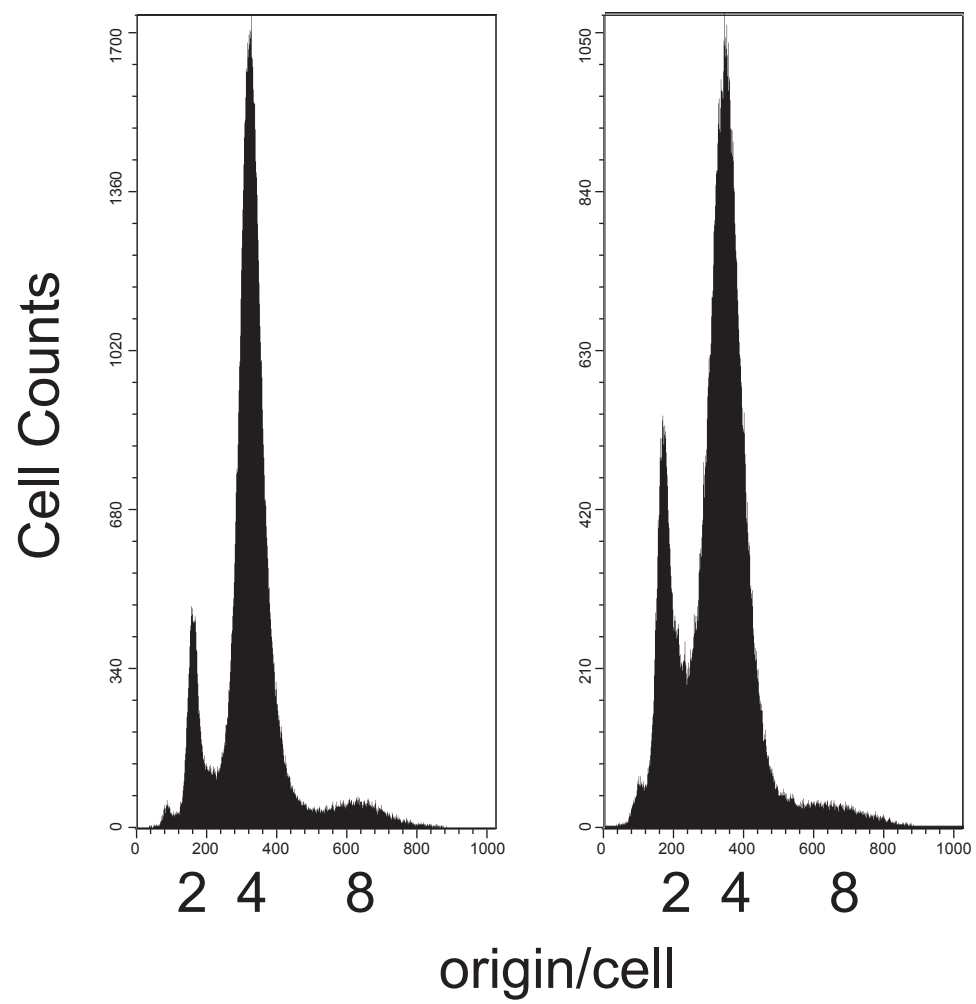
<sup>a</sup> Genes that are downregulated (<0.65) and upregulated (>2.5) in a DnaA-dependent manner in two independent experiments are specified. The operon structure is indicated in parentheses.

<sup>b</sup> Expression levels in NIS2022 cells grown in the absence of IPTG to repress the DnaA level to 1/5 times that in the wild-type strain, CRK6000. Expression level is the average of signal intensities of probes in coding sequences after trimming two of the lowest and highest intensities.

<sup>c</sup> Expression level in NIS2022 cells grown in the presence of 0.1M IPTG to stimulate the DnaA level to 5 times that in the wild-type strain, CRK6000.

<sup>d</sup> Expression levels of *dnaA*, *dnaN* and *sda* were calculated using probes in regions 168..333, 1751..1938, and 2646601..2646849, respectively.

Figure S1







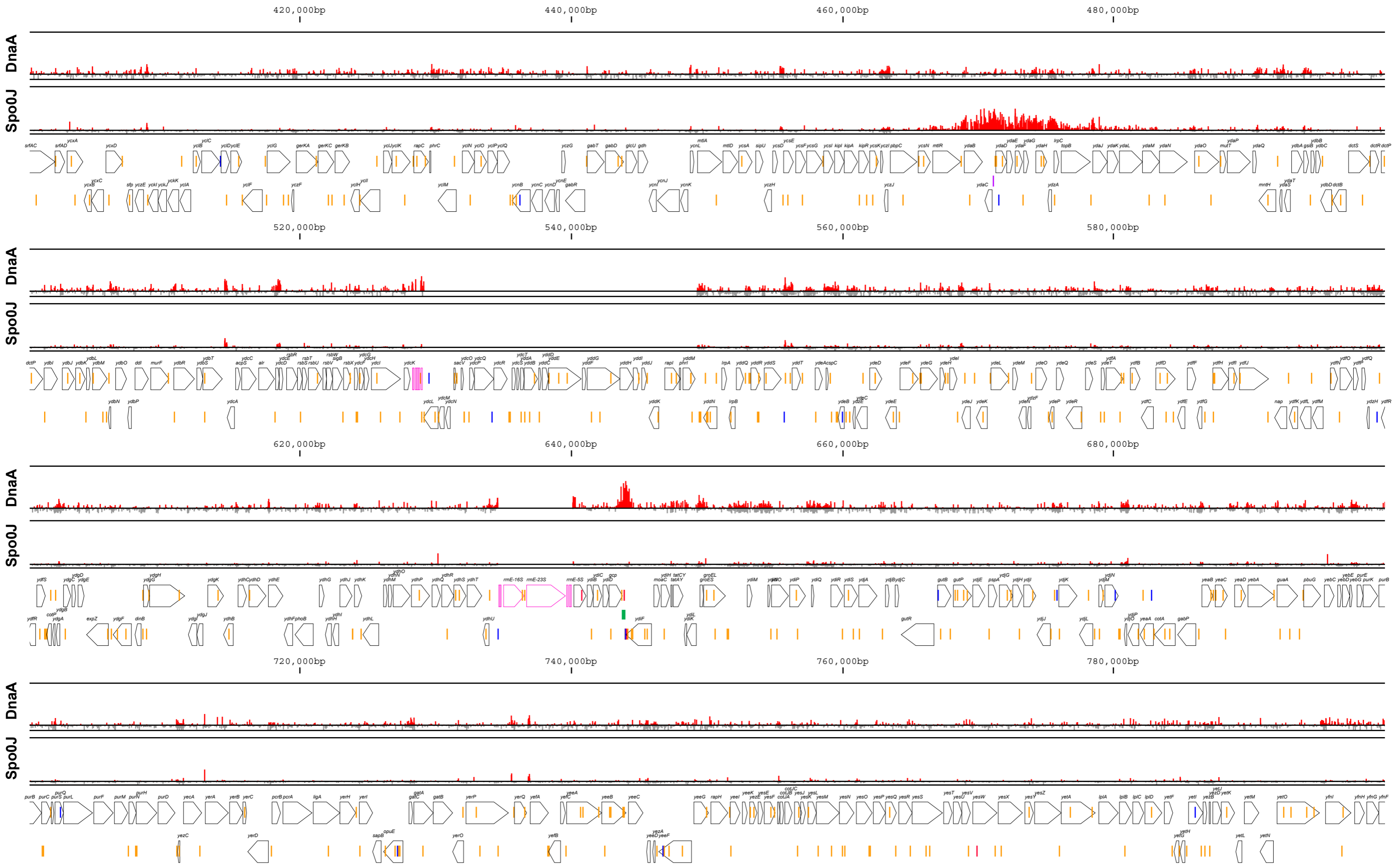


Figure S2-2





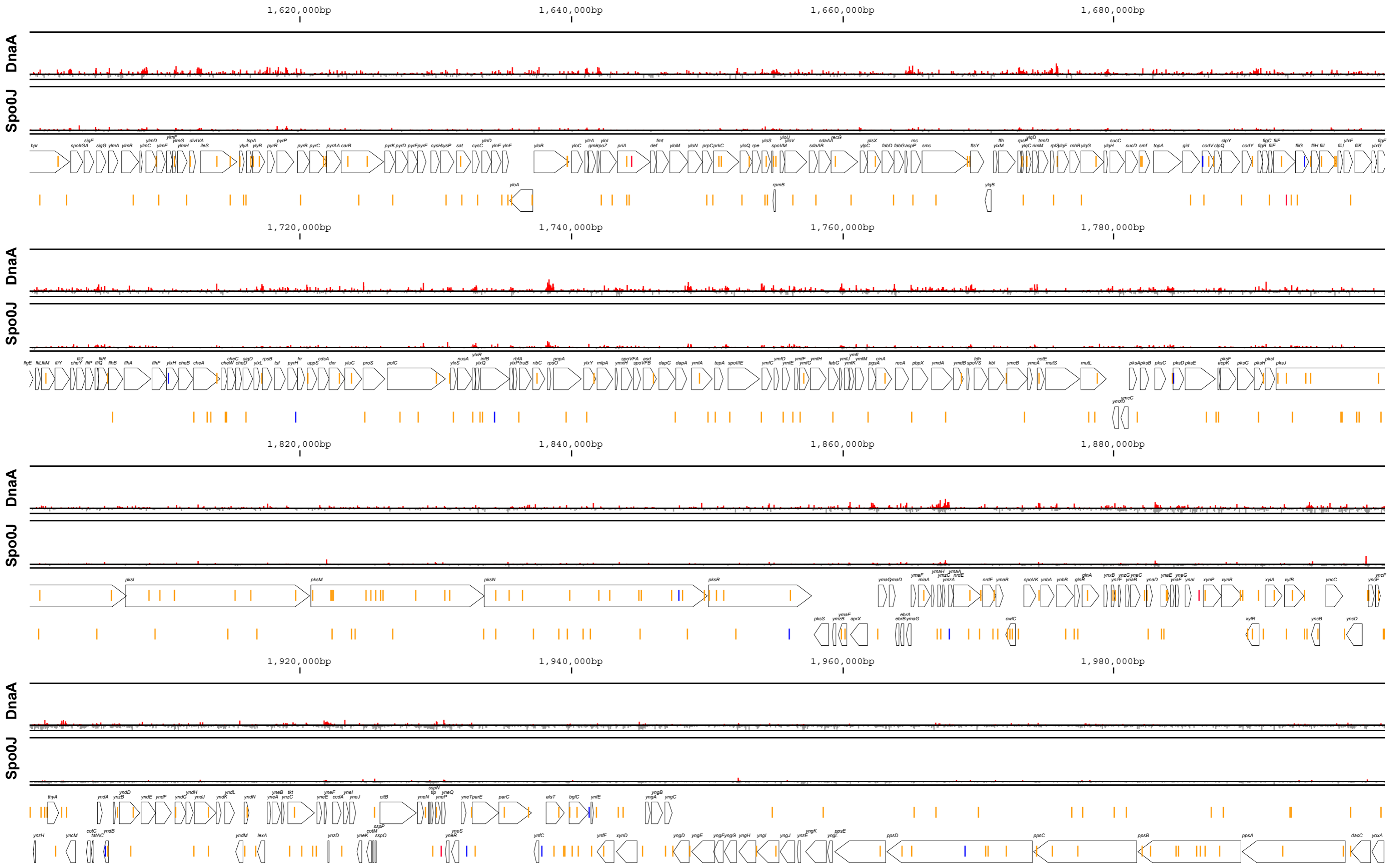


Figure S2-5















Figure S2-10



Figure S3

