

Supplementary Table 1. Genetic differences between published *cps* loci of serotypes 35C and 42 (coding sequence only)

Nucleotide <sup>a</sup>	35C <sup>b</sup>	42 <sup>c</sup>	Gene	Function	Amino Acid <sup>d</sup>
3471	A	G	<i>cpsB/wzh</i>	Phosphotyrosine phosphatase	E152E
3477	T	C			I154I
3482	G	T			<b>R156M<sup>e</sup></b>
3536	C	A			G174G
3541	G	C			<b>R176P</b>
3543	T	G			<b>Y177D</b>
3566	T	G			A184A
3574	T	C			F187F
3577	A	G			L188L
3582	A	G			<b>Q190R</b>
3583	G	T			<b>Q190R</b>
3597	A	G			I195I
3599	C	G			I195I
6039	C	T	<i>cpsE/wchA</i>	Initiating glycosyltransferase	G293G
8484	A	G	<i>wzy</i>	Polymerase	K385K
9132	A	G	<i>wcrI</i>	Glycosyltransferase	<b>Q152R</b>

<sup>a</sup> Nucleotide number is with respect to serotype 35C reference sequence (GenBank Accession No. CR931706)

<sup>b</sup> Accession No. CR931706

<sup>c</sup> Accession No. CR931715

<sup>d</sup> Amino acid sequence differences are with respect to serotype 35C

<sup>e</sup> Boldface indicates a missense substitution

Supplementary Table 2. Primers used for genetic manipulations in this study

<b>Primer<sup>a</sup></b>	<b>Sequence (5'-3')<sup>b</sup></b>	<b>Description</b>
5163	TTAGCGACAGGTGATCATAAGG	Upstream flanking region of <i>wciG</i> in 5705-06
3184	TTCTCCTTTTATAATTAAAAAAT	Upstream flanking region of <i>wciG</i> in 5705-06
5230	TAAAAAAATTATAAAAAGGAGAA CAAGATGTACGATTATC	Downstream flanking region of <i>wciG</i> in 5705-06
3160	GTCTTGAGCTTGACTGCC	Downstream flanking region of <i>wciG</i> in 5705-06
5229	CAAATTATTAGGAAAAACTAGAG TGAGGAGGATATATTG	<i>aad9</i> from pCLT1242
3184	TTCTCCTTTTATAATTAAAAAAT	<i>aad9</i> from pCLT1242
5240	TAGCT <u>A</u> ACTAGTTAGGAGGAAGG AAATAATAATGAGAAAAAAATCG AAATATCAACCTAG	<i>wciG</i> from 5705-06 with SpeI site
3196	<u>TTTTCG</u> CATGCTTATAATTGAC GATTCGATTGAAGTAAG	<i>wciG</i> from 5705-06 with SphI site

<sup>a</sup>Primers beginning in 5 or 3 indicate forward or reverse primers with respect to the reference sequence, respectively.

<sup>b</sup>Underlined residues indicate a restriction site.