

Table S1. Primers used in this study.

Primer name	Sequence 5'-3'	Target gene(s)	Application	Reference
HP0379 F	CTC TCG TGA TCT TGG CTT ATT	<i>futA</i> upstream	Seq	[1]
HP0379 R	AAG TAG CGT CTG CGA TGA	<i>futA</i> downstream	Seq	[1]
C-tract up 651	GCC CTA ATC AAG CCT TTG	<i>futB</i> upstream	Seq	[1]
Repeat down 651	AAA ACC CCA CGC TCA AAA A	<i>futB</i> downstream	Seq	[1]
FucT F1	TTC CAA CCC CTA TTA GAC G	<i>futA</i> , <i>futB</i>	PCR, Seq	[2]
FucT F3	GAT CGT TAT TTG AGA ATG CC	<i>futA</i> , <i>futB</i>	Seq	[2]
FucT F4	CAA AGA CAA CAG CCT TTA TGC	<i>futA</i> , <i>futB</i>	Seq	[2]
FucT F5	GCG AGT TTT TAA GCC AAT AC	<i>futA</i> , <i>futB</i>	Seq	[2]
FucT R1	GTT AAA ATC TTT CGC CAC G	<i>futA</i> , <i>futB</i>	PCR, Seq	[2]
FucT R2	GGG TGT TTA AAG GGT TTT C	<i>futA</i> , <i>futB</i>	Seq	[2]
FucT R3	TTT CTC ACA CTT CCT CCC C	<i>futA</i> , <i>futB</i>	Seq	[2]
FucT R4	GTT GCT CGC TAC AAA ACT G	<i>futA</i> , <i>futB</i>	Seq	[2]
cagAsbra F	ATG ATG GCG TGA TGT TTG T	<i>cagA</i>	PCR	[3]
cagAsbra R	TTT TCA AGG TCG CTT TTT GC	<i>cagA</i>	PCR	[3]
UpCagF	ACT TTC ACG CCC TTT CCC TCC	<i>cag</i> PAI empty site	PCR	[3]
DownCagR	TTG CAT GCG TTA TTA TTT CAC	<i>cag</i> PAI empty site	PCR	[3]
1290	GTG GAT GCG A	randomly	RADP	[4]
1283	GCG ATC CCC A	randomly	RADP	[4]

1. Nilsson C, Skoglund A, Moran AP, Annuk H, Engstrand L, et al. (2006) An enzymatic ruler modulates Lewis antigen glycosylation of *Helicobacter pylori* LPS during persistent infection. *Proc Natl Acad Sci U S A* 103: 2863-2868.
2. Nilsson C, Skoglund A, Moran AP, Annuk H, Engstrand L, et al. (2008) Lipopolysaccharide diversity evolving in *Helicobacter pylori* communities through genetic modifications in fucosyltransferases. *PLoS ONE* 3: e3811.
3. Nilsson C, Sillen A, Eriksson L, Strand ML, Enroth H, et al. (2003) Correlation between *cag* pathogenicity island composition and *Helicobacter pylori*-associated gastroduodenal disease. *Infect Immun* 71: 6573-6581.
4. Akopyanz N, Bukanov NO, Westblom TU, Berg DE (1992) PCR-based RFLP analysis of DNA sequence diversity in the gastric pathogen *Helicobacter pylori*. *Nucleic Acids Res* 20: 6221-6225.