





**Supplementary Figure 1.** Sequence alignment of the *cysS-vacA* intergenic region of 27 *H. pylori* clinical isolates ranked in order of in vivo relative *vacA* mRNA level from highest (top) to lowest (bottom). Relative in vivo *vacA* mRNA level (shown in the right-hand column) was quantified by reverse transcriptase quantitative polymerase chain reaction (RT-qPCR) using cDNA synthesised from total RNA purified from patient gastric biopsies. *H. pylori* 16S rRNA was used as a reference gene, and *vacA* mRNA level was measured relative to that of a comparator biopsy cDNA sample included in each run (assigned an arbitrary value of 100). The following features described in the Results section are annotated: an upstream inverted repeat (orange shading); the -35 and -10 promoter sequences (green shading); the 5' untranslated region stem loop (yellow shading); and the Shine-Dalgarno sequence (blue shading). The start of the *vacA* transcript is labelled +1, and the polymorphisms at nucleotides -32, -14, -7 and G(+28)A, described in the Results section, are indicated by arrows. Nucleotide identity to the consensus sequence is shown by a dot, and gaps in the alignment are indicated by a dash.