**Supplementary data**

**Fig. S1.** SDS-PAGE analysis of expression and purification of CagA domains. Lanes 1–3 show induction and solubility in BL21 (DE3) cells: (1) total protein from uninduced cells; (2) total protein from induced cells; (3) soluble protein fraction from induced cells. Lanes 4-8 and w show steps in purification: (4) unbound protein fraction after flowing cell lysate through a Ni-chelating column; (w) flow-through in the wash step with buffer B; (5) eluate from the Ni-chelating column after wash; (6) the product of TEV cleavage (7) the product of TEV cleavage passed through the Ni-chelating column; (8) pooled fractions after gel filtration chromatography.
Fig. S2. SDS-PAGE showing the time-course of digestion of CagA-N (a) and CagA-R (b) by trypsin.