

**Fig. S1** Complementation of sigH. A. Semi-quantitative RT-PCR of comK, sigH, comGA, comEA, and comFA genes, wt: phage-cured EGDe strain; ΔsigH: sigH deletion strain; ΔsigH+pMAD-tet-sigH: sigH deletion strain complemented with pMAD-tet-sigH. Sampling point is shown in Fig. 2. A representative result is shown from 3 independent experiments. The sigH complementation restored the expression of comGA, comEA. B. Intracellular growth in RAW 264.7 macrophages, wt+pMAD-tet: phage-cured EGDe strain carrying pMAD-tet; \(\Delta\)sigH+pMAD-tet: \(sigH\) deletion strain carrying pMAD-tet; ΔsigH+pMAD-tet-sigH: sigH deletion strain complemented with pMAD-tet-sigH. Means of 3 independent experiments are shown. The sigH complementation restored the intracellular growth in macrophages. C. Intracellular growth in HeLa cells. We noted that cells carrying pMAD-tet or pMAD-tet-sigH exhibited heterogeneous colony size after the passage through HeLa cells due to unknown reasons. Therefore, we used a chromosomally complemented strain, c-\Delta sigH. wt: phage-cured EGDe strain; \Delta sigH: sigH deletion strain; c-ΔsigH: sigH chromosomal complementation of ΔsigH. c-ΔsigH recovered the growth deficiency in HeLa cells, confirming that the disruption of the sigH locus leads to the growth deficiency. Means of at least 2 independent experiments are shown. D. Intracellular growth on RAW264.7 cells. Strains are the same as in C. In line with the plasmid-complemented strain  $(\Delta sigH+pMAD-tet-sigH)$ , chromosomally cured c-ΔsigH also recovered the intracellular growth in macrophages. Means of at least 2 independent experiments are shown.