

Contribution of SPI-1 bistability to *Salmonella enterica*
cooperative virulence: insights from single cell analysis

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SUPPLEMENTARY MATERIAL

Table S1. *S. enterica* strains constructed for this study

Strain	Genotype
SV7884	SL1344 <i>sipB</i> ::GFP (Cm ^R)
SV8302	SL1344 <i>sipB</i> ::mCherry (Km ^R)
SV9244	SL1344 ΔSPI-1::Km ^R
SV9250	SL1344 <i>sipB</i> ::mCherry (Km ^R) <i>ompC</i> ::GFP (Cm ^R)
SV9418	SL1344 <i>sipB</i> ::3xFLAG(Km ^R)
SV8348	SL1344 <i>prgH</i> ::GFP (Cm ^R) inserted at the <i>putPA</i> locus*
SV6806	SL1344 <i>hilA</i> ::GFP (Cm ^R)

* Constructed by P22 HT-mediated transduction using JH3010¹ as a donor.

1. Hautefort, I., Proen  a, M. J. & Hinton, J. C. D. Single-copy green fluorescent protein gene fusions allow accurate measurement of *Salmonella* gene expression *in vitro* and during infection of mammalian cells. *Appl. Environ. Microbiol.* **69**, 7480–7491 (2003).

Table S2. Oligonucleotides used in this study

Oligonucleotide name	Sequence (5'-3')
SPI1P1	AGCATAACGGCATTGTTATCGAATCGCTCATAAAGCGTTGTGAG GGAGCTGCTTC
SPI1P2	TATAAGGCTTGCAGTCTTCATGGGCAGCAAGTAACGTCTCATATG TCCTCCTTAG
sipB-GFP-FOR	AGCAAAATGCGGATGCTTCGCGTTTATTCTGCCAGAGTCGCG ATAAGAAGGAGATACATATGAG
sipB-GFP-REV	ATTCCCACATTACTAACATATTTCTCCCTTATTTGGCAG ATCACTTATTCAAGCGTA
sipB-mch-F	AGCAAAATGCGGATGCTTCGCGTTTATTCTGCCAGAGTCGCG ATAAGAAGGAGTACATATGGTGAGCAAGGGC
sipB-mCh-R	ATTCCCACATTACTAACATATTTCTCCCTTATTTGGCAG AATATCCTCCTTAGTTCC
P1-sipB-F	AGCAAAATGCGGATGCTTCGCGTTTATTCTGCCAGAGTCGCG CTACAAAGACCATGACGG
P2-sipB-R	ATTCCCACATTACTAACATATTTCTCCCTTATTTGGCAG TATGAATATCCTCCTTAG
hilA-GFP-FOR	TTTGGTTCAAAAGATGGAAACAGGATCCCCGCTTGATTAAATTACG TAAGAAGGAGATACATATGAG
hilA-GFP-FOR	CAACCAGATTACGATGATAAAAAAAATATGCATATCTCCTCTCAC TATCACTTATTCAAGCGTA

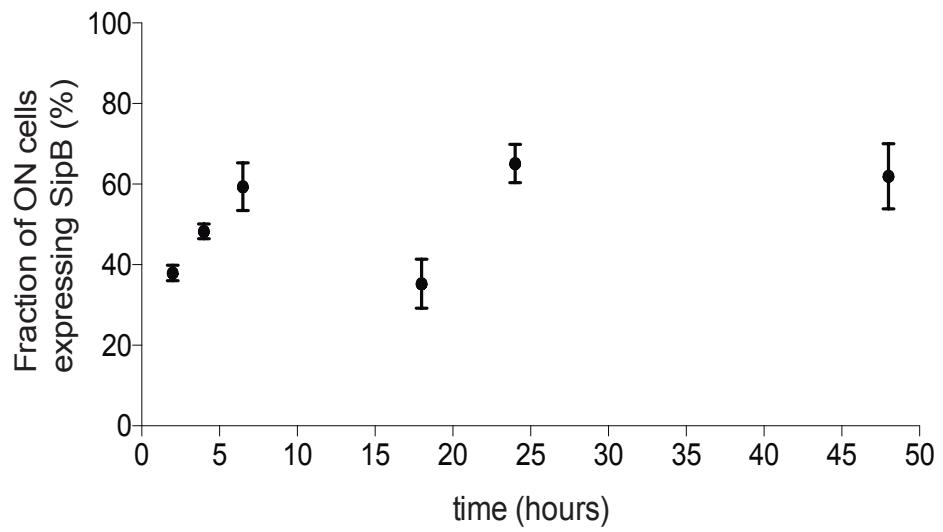


Figure S1. Fractions of SPI-1^{ON} *Salmonella* cells at different stages of the cell cycle analyzed by immunostaining. The strain used was SV9418 (*sipB*::3xFLAG).

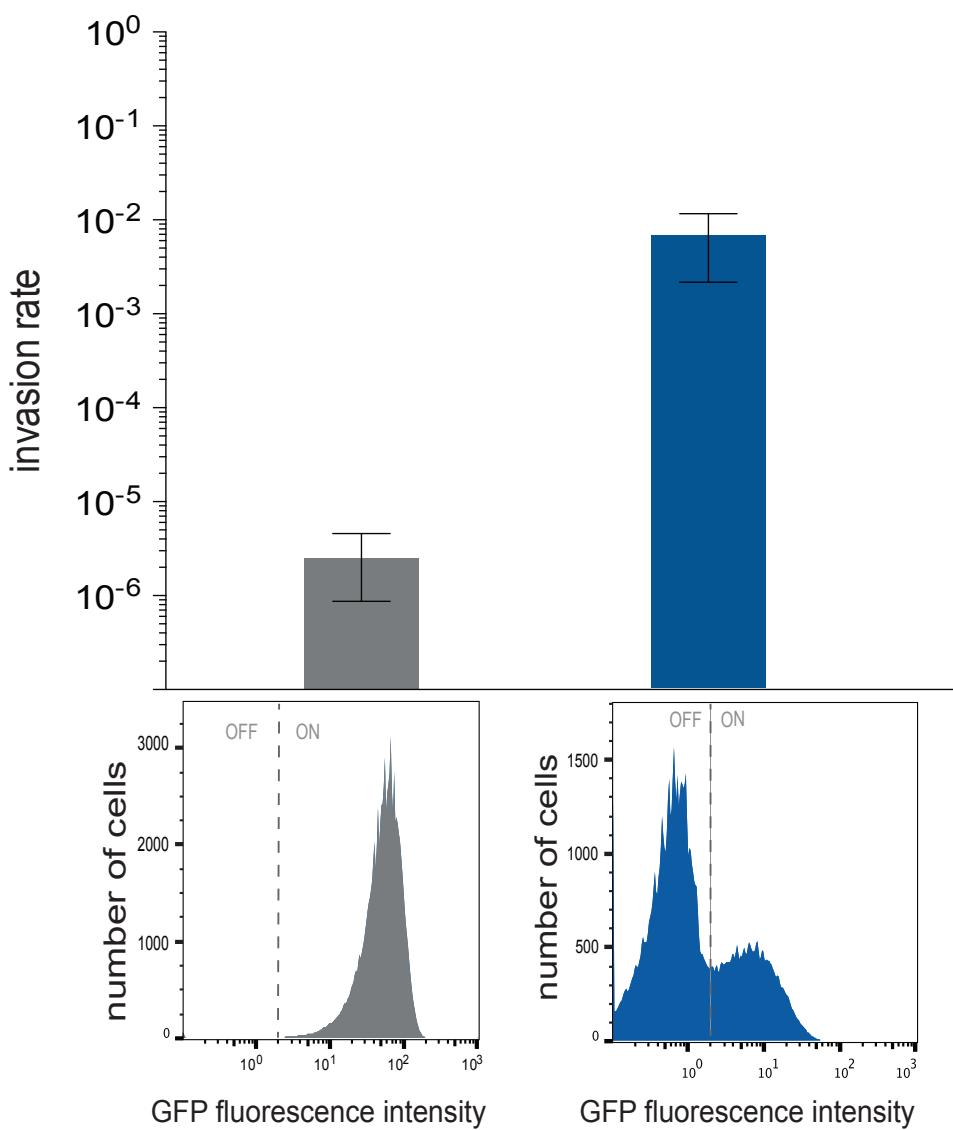


Figure S2. Invasion of epithelial cells by strain SV7884 (*sipB*::GFP) grown under growth conditions that permit unimodal or bimodal expression of SPI-1. Expression of *sipB*::GFP and invasion of epithelial cells were analyzed under aeration (grey bar and histogram) and under oxygen limitation (blue bar and histogram).