

TITLE

Characterization of *Campylobacter jejuni* RacRS reveals a role in the heat shock response, motility, and maintenance of cell length population homogeneity

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Table S1. Primers used in the study

Table S2. Plasmids used in this study.

Table S1. Primers used in this study.

Primer Name	Description	Sequence 5'→3' Restriction sites are underlined
racR-1	Construction of Δ racR <i>Campylobacter jejuni</i>	TCCTCAA <u>AA</u> ACCACCAA <u>AA</u> ACC
racR-2		AA <u>GATTATA</u> AA <u>CCCTAT</u> CACTAG
racR-3		AA <u>AGAATTCTA</u> ATTGTGCAAAGTCAGGATC
racR-4		AA <u>AGGATCC</u> ATCGGTCGCTTAAGGGTA
racS-1	Construction of Δ racS <i>Campylobacter jejuni</i>	GCAATATTCCTATTATCATCTC
racS-2		AGCGATTTTACTAAAAGTTAGG
racS-3		AA <u>AGAATTCA</u> ATCAGTTTGGTATGAATAG
racS-4		AA <u>AGGATCC</u> GATGATGGAAAGCATTGC
dnaJ-1	Construction of Δ dnaJ <i>Campylobacter jejuni</i>	CATAATCCTTGCATACATTTCTTTTGG
dnaJ-2		AGTTGTAATCGAAGATCAAGGTAATC
dnaJ-3		AA <u>AGAATTCA</u> AGAAGTTCATAATAACTTA
dnaJ-4		AA <u>AGAATTC</u> ACTAATTGGTTTAAAGTCTT
5'-racR-SpeI	<i>racR</i> complementation	AA <u>AACTAGT</u> AAA <u>ACTTC</u> CATAGGCTTC
3'-racR-EcoRI		AA <u>AGAATTC</u> ATCCTATCAGTTTATATC
5'-SmaI-luxC	Cloning of the <i>luxCDABE</i> operon into pRY112	AA <u>ACCCGGG</u> AAATGGATGGCAAATAT
3'-PstI-luxE		AA <u>ACTGCAG</u> CAAAGGATATCAACTATC
5'-PracR-NotI	Construction of <i>P_{racR}-lux</i> pRY112	AA <u>AGCGGCCG</u> CAA <u>AACTTC</u> CATAGGCTTC
3'-PracR-SmaI		AA <u>ACCCGGGT</u> CTAGTGTCCCTTGTAAT
5'-PdnaJ-NotI	Construction of <i>P_{dnaJ}-lux</i> pRY112	AA <u>AGCGGCCG</u> CCTTGAATACCCAC
3'-PdnaJ-SmaI		AA <u>ACCCGGG</u> ATTATTCCTTTAAAAAATTT
5'-racR-EcoRI	Cloning of racR ORF into pBAD24	AA <u>AGAATTC</u> AGAATGATTAATGTGTTG
3'-racR-PstI		AA <u>ACTGCAG</u> TTTGGTATGAATAGAAT
5'-pBAD-XhoI	Cloning of <i>araC</i> or <i>araC-racR</i> into pRY112- <i>luxCDABE</i>	AA <u>ACTCGAG</u> ATGCATAATGTGCCTG
3'-pBAD-ApaI		AA <u>AGGGCCCT</u> TTTTCAATATTATTGAAG
5'-SmaI-gfp	Cloning of the <i>gfp</i> ORF into pRY112	AA <u>ACCCGGG</u> TTTAAGAAGGAGATATAC
3'-XhoI-gfp		AA <u>ACTCGAG</u> ATTTATTTGTATAGTTCATC
5'-NotI-atpF'	Construction of <i>gfp</i> expressing strains	AA <u>AGCGGCCG</u> CATAATAGGTCAAAAAC
3'-SmaI-atpF'		AA <u>ACCCGGG</u> AATTCTCCTTGGTTAG
rpoA-F	RT-qPCR	CGAGCTTGCTTTGATGAGTG
rpoA-R		AGTTCCACAGGAAAACCTA
dnaJ-F	RT-qPCR	GATCATCGCCGCTGAAGATGATACT
dnaJ-R		TTCACCGCGTATGGTGGGTACTTT
dnaK-F	RT-qPCR	CGCGGTATGCCACAAATCGAAGTT
dnaK-R		TCTCTTGAGCCCTACCTGTTGCTT
groEL-F	RT-qPCR	GAAGCAATTGGCGCAGCTATCGTT
groEL-R		CCACACCTGCATCAAATCCTGCAT

Table S2. Plasmids used in this study.

Plasmid	Description	Reference
pRY112	<i>Campylobacter</i> replicating plasmid with chloramphenicol resistance (<i>cat</i>) ORF	(76)
<i>P_{racR}-lux</i> pRY112	<i>Campylobacter</i> replicating plasmid with <i>luxCDABE</i> operon driven by the <i>racR</i> transcriptional regulatory region	This study
<i>P_{dnaJ}-lux</i> pRY112	<i>Campylobacter</i> replicating plasmid with <i>luxCDABE</i> operon driven by the <i>dnaJ</i> transcriptional regulatory region	This study
<i>P_{dnaJ}-lux/araC</i> pRY112	<i>E. coli</i> replicating plasmid with <i>luxCDABE</i> operon driven by the <i>dnaJ</i> transcriptional regulatory region and <i>araC</i> ORF	This study
<i>P_{dnaJ}-lux/araC/P_{BAD}-racR</i> pRY112	<i>E. coli</i> replicating plasmid with <i>luxCDABE</i> operon driven by the <i>dnaJ</i> transcriptional regulatory region and <i>araC-racR</i>	This study
<i>P_{atpF'}-gfp</i> pRY112	<i>Campylobacter</i> replicating plasmid with <i>gfp</i> ORF driven by the <i>atpF'</i> transcriptional regulatory region	This study