

**Stringent response factor DksA contributes to fatty acid degradation
function to influence cell membrane stability and polymyxin B
resistance of *Yersinia enterocolitica***

Can Huang¹, Wenqian Li¹, Jingyu Chen^{1*}

1 Beijing Laboratory for Food Quality and Safety, College of Food Science &

Nutritional Engineering, China Agricultural University, Beijing 100083, China

* Corresponding author: Jingyu Chen

Address: 17 Qinghua East Rd., Beijing 100083, China

E-mail: chenjy@cau.edu.cn

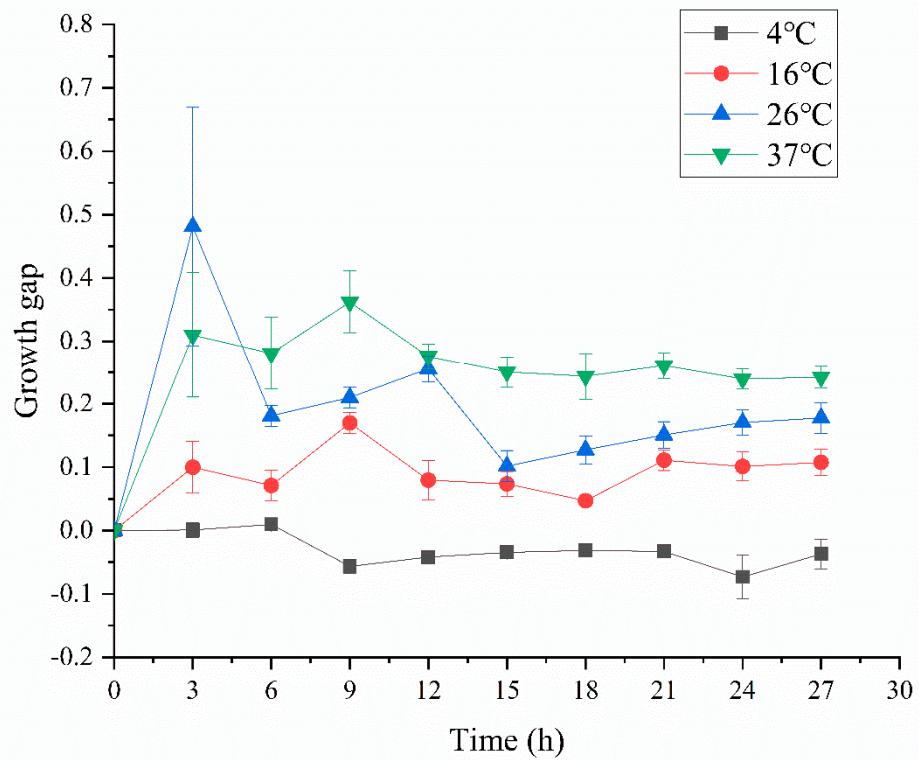
Supplementary Table S1 Primers used in this study

Primers name	DNA Sequences (5' to 3')	Application
16s rRNA-F	GCACGTAATGGTGGGAAGCTC	RT-qPCR
16S rRNA-R	CTCCAATCCGGACTACGACA	RT-qPCR
YZ- <i>fadA</i> -F	AGTACCCGCCAGCCA	RT-qPCR
YZ- <i>fadA</i> -R	GAGCAGCAAACGCCT	RT-qPCR
YZ- <i>fadJ</i> -F	TGCAACAAGCACAGGCCTTG	RT-qPCR
YZ- <i>fadJ</i> -R	GATATCAGCACCAGCGATAAA	RT-qPCR
YZ- <i>fadE</i> -F	ACTGCGCCAATCCCT	RT-qPCR
YZ- <i>fadE</i> -R	GGTTCCCGCATCAATCGC	RT-qPCR
YZ- <i>fadD</i> -F	AGATGTGGTGGCGTTACAT	RT-qPCR
YZ- <i>fadD</i> -R	TTACTGTCTCGCCGAAACC	RT-qPCR
YZ- <i>fadR</i> -F	GACAGCGTGCCACAATTGAT	RT-qPCR
YZ- <i>fadR</i> -R	GCGTTATCGTCAACCGTCTG	RT-qPCR
YZ- <i>fadI</i> -F	CCCTTTGCCAAGCAGGCTAC	RT-qPCR
YZ- <i>fadI</i> -R	TCAATCAATTGAGGAGCAAC	RT-qPCR
YZ- <i>fabA</i> -F	TGGGCCTTGATGCCATGT	RT-qPCR
YZ- <i>fabA</i> -R	CTGGCAGGACTTGC	RT-qPCR
YZ- <i>fabB</i> -F	GAATTTAAAGACGCAGGCATG	RT-qPCR
YZ- <i>fabB</i> -R	AAGCGCAGCACTTTACGGTC	RT-qPCR
YZ- <i>fabD</i> -F	GTGGCAGTTAGTGCAACAAG	RT-qPCR
YZ- <i>fabD</i> -R	CTGCCAAACGCGCCAGATAG	RT-qPCR
YZ- <i>fabF</i> -F	GCCAGTAGGCGATCTCGG	RT-qPCR
YZ- <i>fabF</i> -R	GACCAGTCGCTGACTTAGT	RT-qPCR
YZ- <i>fabY</i> -F	GATGCTTATGATGCAATGGC	RT-qPCR
YZ- <i>fabY</i> -R	TCTCACTGATGGGTCTACCG	RT-qPCR
YZ- <i>fabR</i> -F	TTTGCGGGAGGTCTCCCG	RT-qPCR
YZ- <i>fabR</i> -R	CGCTTTCGTCGACCATTGTC	RT-qPCR
YZ- <i>fabG</i> -F	TATTGGTACTGCGACCAGTG	RT-qPCR
YZ- <i>fabG</i> -R	CTCGATTGACGCGGGATCCA	RT-qPCR

Supplementary Table S2 Growth gap between YEND and WT when exposed to polymyxin B

Time (h)	0 MIC	1/2 MIC	1/4 MIC	1/8 MIC
10	6.55%	6.80%	5.93%	5.36%
20	11.36%	19.52%	12.03%	11.27%
30	15.88%	20.35%	17.35%	16.15%
40	10.24%	16.91%	13.09%	11.49%
50	7.82%	10.66%	9.49%	8.93%

Growth Gap = (biomass of WT-biomass of YEND)/ biomass of WT



Supplementary Figure S1 Growth gap between YEND strain and WT strain at different temperatures. Growth Gap = (biomass of WT-biomass of YEND)/ biomass of WT, Data are mean of growth gap for three independent experiments and standard errors of the means.