

**Table S1.** Bacterial strains and plasmids used in this study.

Strains or plasmids	Relevant characteristic(s)	Source or reference
<b>Strains</b>		
LF82	<i>E. coli</i> isolated from an ileal biopsy sample of a patient with CD, Ery <sup>R</sup>	(6)
LF82- $\Delta$ <i>rpoE</i>	LF82 isogenic mutant with <i>rpoE</i> gene deleted	This study
LF82- $\Delta$ <i>fimA</i>	LF82 isogenic mutant with <i>fimA</i> gene deleted	(18)
MG1655	<i>E. coli</i> K-12 serotype OR:H48:K-	Laboratory stock
<b>Plasmids</b>		
pKOBEG	pBAD cloning vector harboring $\lambda$ phage red $\gamma$ $\beta\alpha$ operon; Cm <sup>R</sup>	(30)
pBAD24	<i>E. coli</i> cloning vector, Amp <sup>R</sup>	(32)
pBAD30	<i>E. coli</i> cloning vector, Amp <sup>R</sup>	(32)
pBAD24- <i>rseAB</i>	pBAD24 harboring the 1614-bp XbaI-HindIII fragment containing the entire <i>rseAB</i> operon of LF82	This study
pBAD30- <i>rpoE</i>	pBAD24 harboring the 575-bp EcoRI-SalI fragment containing the entire <i>rpoE</i> gene of LF82	This study
pRS550	<i>E. coli</i> multicopy <i>lacZ</i> fusion vector; Km <sup>R</sup> , Amp <sup>R</sup>	(29)
pRS550- <i>rpoE</i>	pRS550 harboring the 251-bp BamHI-EcoRI fragment containing DNA sequence upstream the <i>rpoE</i> gene of strain LF82	This study
pRS550- <i>rpoH</i>	pRS550 harboring the 251-bp BamHI-EcoRI fragment containing DNA sequence upstream the <i>rpoH</i> gene of strain LF82	This study
pFPV25.1	Plasmid constitutively expressing GFP	(37)
pHSG575- <i>fim</i>	pHSG575 harboring the entire <i>fim</i> operon	(18)

**Table S2.** Oligonucleotides used and PCR product sizes.

Primer name	Oligonucleotide sequence (5'-3')	PCR product size (bp)	Use
XbaI- <i>rseAB</i>	GCTCTAGAGCTAGGCATGCAGAAAGAACAACCTT	1614	Overexpression of RseA and RseB
HindIII- <i>rseAB</i>	CCCAAGCTTGGGGATCATTGCGCTGTCCCGAA		
16S-1	ATGACCAGCCACACTGGAAC	157	RT-PCR
16S-2	CTTCCTCCCGCTGAAAGTA		
<i>rseA</i> -1	TCAGAAGGTACTCCCAGACT	200	RT-PCR
<i>rseA</i> -2	CCATTCTGGCAGAAAGTACG		
BamHI- <i>rpoE</i>	GGAATTCCGCTATCGAAACGCCACTCCA	251	Fusion of the DNA sequence upstream the <i>rpoE</i> gene and the <i>lacZ</i> gene
EcoRI- <i>rpoE</i>	CGGGATCCCGACGAGAAAGTTACTGGCTGGTG		
BamHI- <i>rpoH</i>	GGAATTCCAAATCCTCTCAATCGATATCTTC	251	Fusion of the DNA sequence upstream the <i>rpoH</i> gene and the <i>lacZ</i> gene
EcoRI- <i>rpoH</i>	CGGGATCCCGCTGAATAATAAAAAGCGTGTATA		
IM <i>rpoE</i> -1	GCACCCATATGAATATCCTCCTTAG	1495	LF82- <i>ΔrpoE</i> isogenic mutant construction
IM <i>rpoE</i> -2	TGGCGTTTCGATAGCGCGTGGAAATTTGGTTTGGGGAGAC		
	TTTACCTCGGGTAGGCTGGAGCTGCTTC		
K1	CAGTCATAGCCGAATACCCT	369	Isogenic mutant verification, RT-PCR
K2	CGGTGCCCTGAATGAACTGC		
Kt	CGGCCACAGTCGATGAATCC		
<i>rpoE</i> -1	GAGGGACTCAATAGTTCGGA		
<i>rpoE</i> -2	AAGGGAGATCAGAAAGCC		
XbaI- <i>rpoE</i>	GGCCTTAAGGCCAGTGGCGTTTCGATAGCGCGT	575	Transcomplementation of LF82- <i>ΔrpoE</i> isogenic mutant
Sall- <i>rpoE</i>	ACGCGTCGACGTCCCGCTATCGTCAACGCCTG		
<i>fimE</i>	GCAGGCGGTTTGTTACGGGG	750	Off-oriented invertible element
<i>inv</i>	GAGGTGATGTGAAATTAATTTAC		
<i>fimA</i>	GATGCGGTACGAACCTGTCC	450	On-oriented invertible element

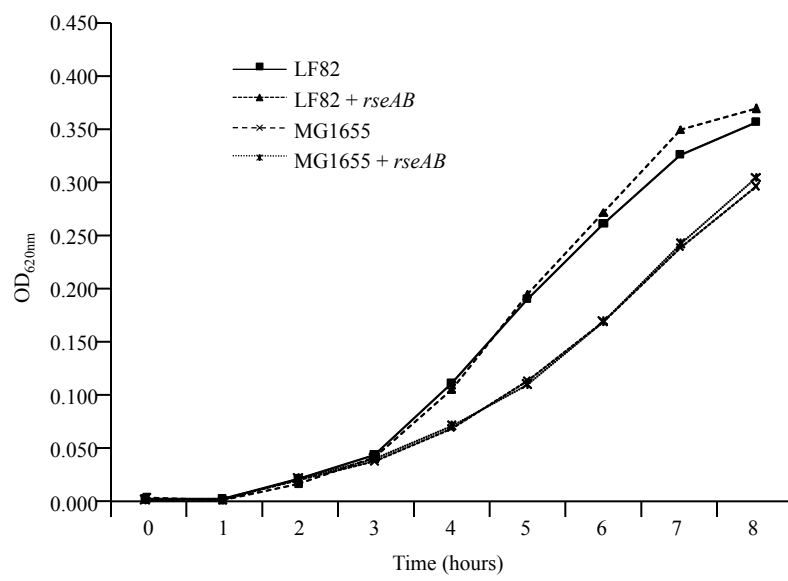
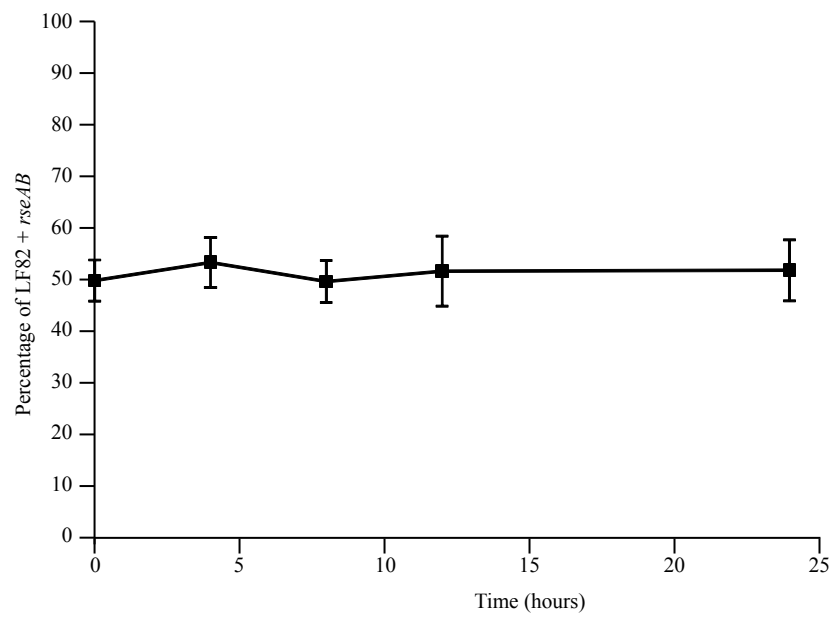


Figure S1.



**Figure S2.**