

- 1 **SUPPLEMENTAL TABLE 1.** Bacterial shedding in feces and colonization levels of AIEC and AIEC Δ *ibeA* in
- 2 the mice intestine throughout infection.

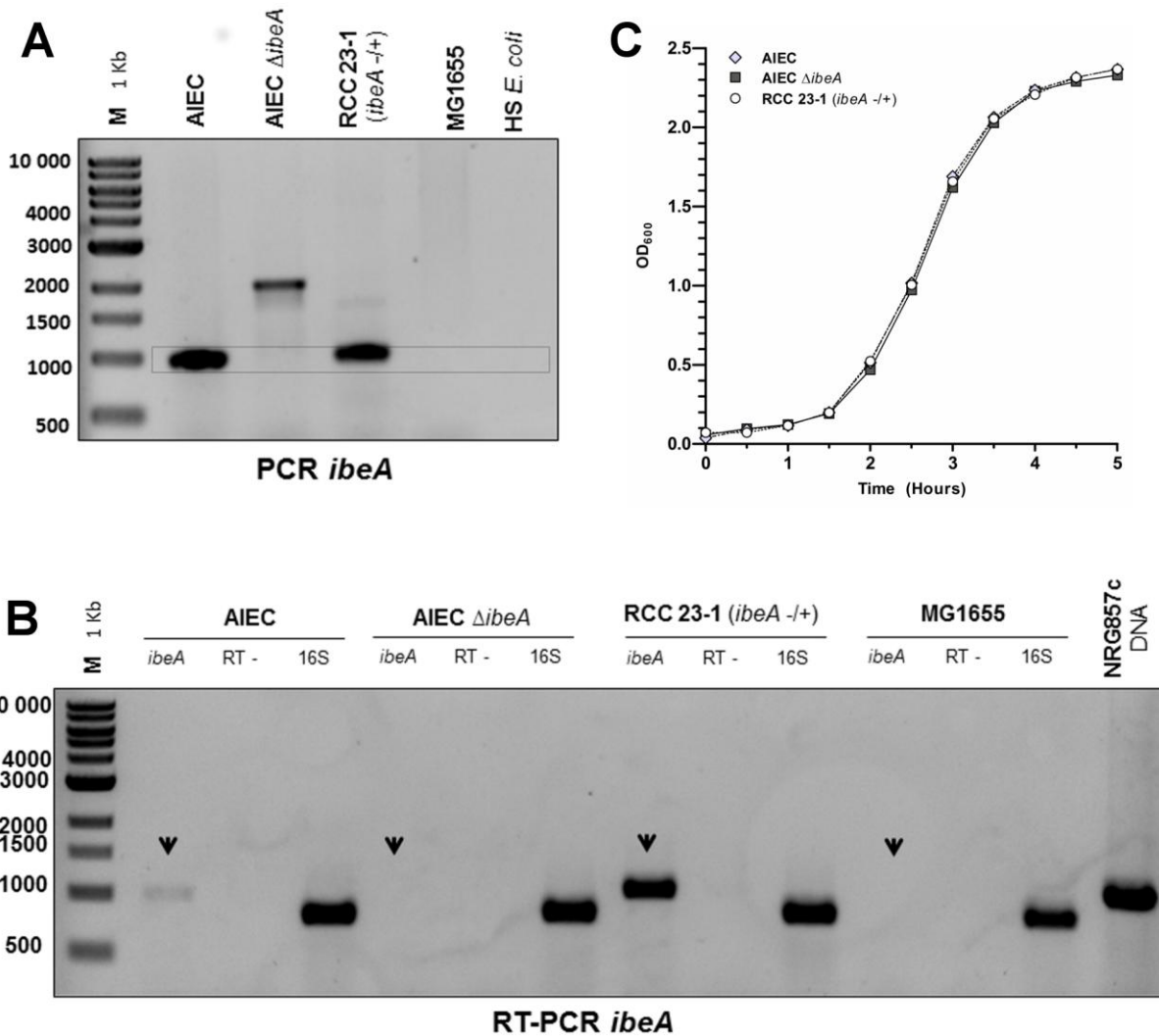
	CFU x g ⁻¹ (feces)		
	NRG857c	NRG857c Δ <i>ibeA</i>	MG1655 (K12 <i>E. coli</i>)
Day 1	1.72E+09 ± 3.31E+08	7.61E+08 ± 2.50E+08 ^{ns}	3.17E+08 ± 2.15E+08**
Day 2	2.69E+09 ± 7.37E+08	4.03E+08 ± 1.52E+08 ^{ns}	3.64E+06 ± 2.76E+06***
Day 3	8.97E+07 ± 3.20E+07	2.46E+07 ± 1.17E+07 ^{ns}	1.63E+04 ± 1.10E+04***
Day 4	1.74E+07 ± 1.61E+07	8.40E+06 ± 4.64E+06 ^{ns}	1.74E+04 ± 1.69E+04*
Day 6	6.73E+03 ± 4.52E+03	4.24E+04 ± 2.62E+04 ^{ns}	1.84E+01 ± 1.84E+01 ^{ns}
Day 8	1.56E+03 ± 1.01E+03	4.96E+04 ± 3.97E+04 ^{ns}	ND ^{ns}
Day 10	9.74E+02 ± 9.08E+02	1.60E+04 ± 1.41E+04 ^{ns}	ND ^{ns}
Day 12	6.08E+03 ± 6.07E+03	5.77E+03 ± 3.99E+03 ^{ns}	ND ^{ns}
Day 14	1.31E+03 ± 9.38E+02	2.63E+03 ± 1.65E+03 ^{ns}	ND ^{ns}
	CFU x g ⁻¹ (organ)		
	NRG857c	NRG857c Δ <i>ibeA</i>	MG1655 (K12 <i>E. coli</i>)
Day 4 (Ileum)	8.08E+03 ± 4.02E+03	9.06E+02 ± 4.19E+02 ^{ns}	ND**
Day 4 (Cecum)	5.03E+05 ± 2.95E+05	3.95E+06 ± 2.54E+06 ^{ns}	2.79E+03 ± 2.65E+03*
Day 4 (Colon)	3.27E+05 ± 2.81E+05	3.42E+05 ± 3.12E+05 ^{ns}	6.36E+03 ± 6.17E+03*
Day 14 (Ileum)	1.29E+02 ± 1.05E+02	2.44E+04 ± 2.17E+04 ^{ns}	ND ^{ns}
Day 14 (Cecum)	7.08E+02 ± 5.17E+02	3.11E+03 ± 2.41E+03 ^{ns}	ND ^{ns}
Day 14 (Colon)	4.19E+02 ± 3.10E+02	4.14E+02 ± 3.56E+02 ^{ns}	ND ^{ns}
	Values represent the mean ± SE at each time point		
	* $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$ denote statistical significance when compared to NRG857c		
	ND = non detectable levels of bacteria		

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5 Supplemental Figures

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9 **SUPPLEMENTAL FIGURE 1. Deletion of *ibeA* at genomic and transcriptional levels.** Genomic DNA from

10 AIEC strain NRG857c, AIEC Δ *ibeA* (NRG857c Δ *ibeA*) and the complemented RCC23-1 strain (*ibeA*-/+),

11 were used to test for the presence of *ibeA*. As negative controls the strains MG1655 and *E. coli* HS were

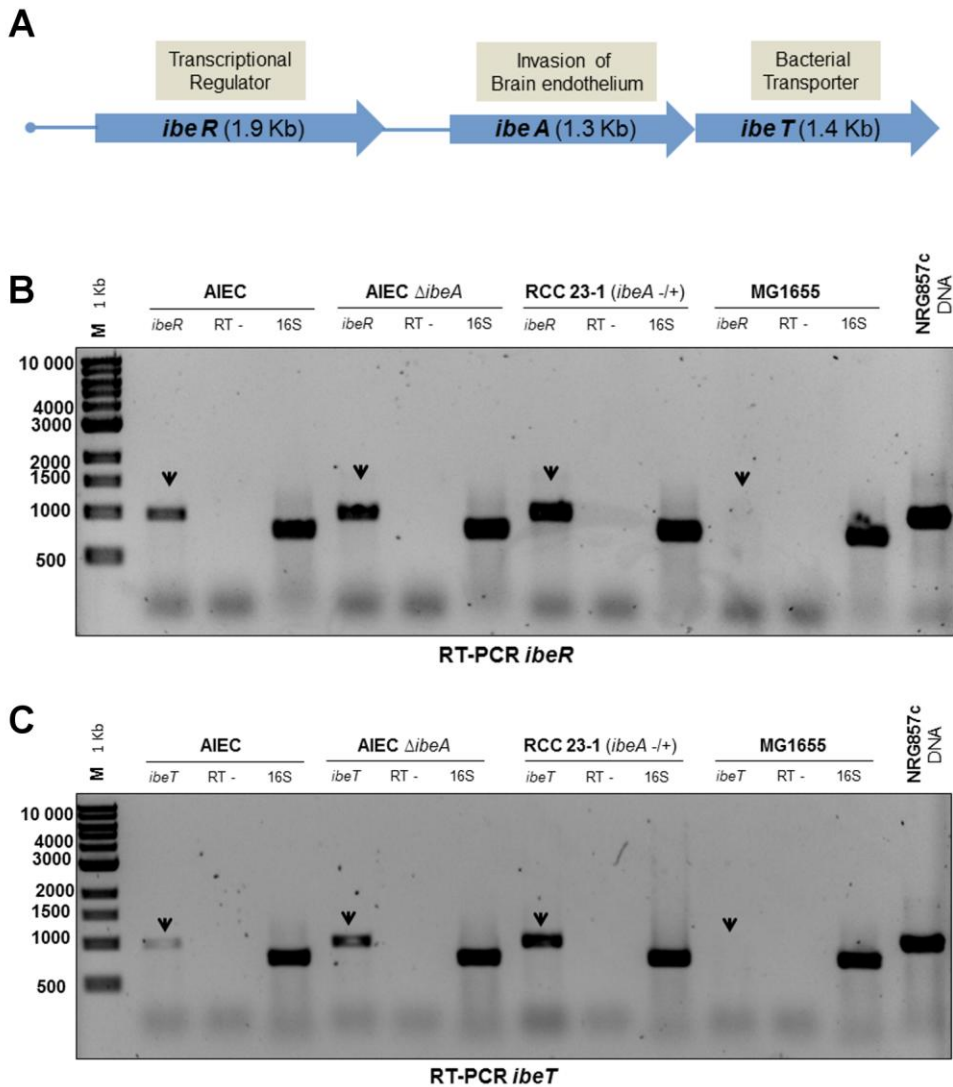
12 used (A). RNA was also extracted and RT-PCR performed on the same strains. 16S ribosomal RNA was

13 used as an internal expression control. The absence of *ibeA* can be observed in AIEC Δ *ibeA*, while a

14 transcript is observed in the wild type strain (B). The growth of the strains was monitored in LB broth up to

15 5 h (C).

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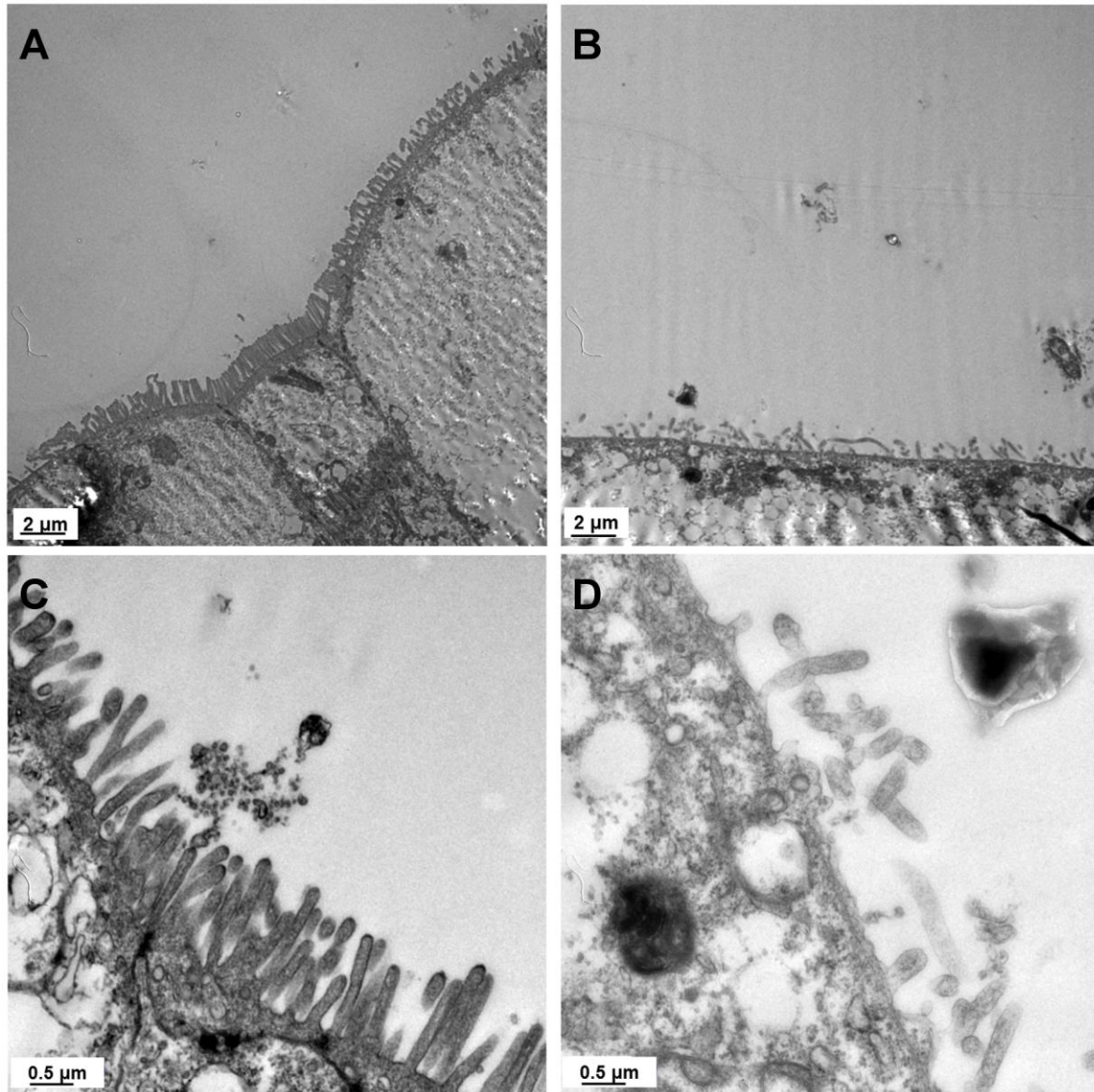
19 **SUPPLEMENTAL FIGURE 2. Effect of *ibeA* deletion in the other members of the *ibeRAT* operon.** An
 20 schematic model of the *ibeRAT* operon is depicted, with the putative roles of each gene product (**A**).
 21 RNA was extracted and the effect on the two other members of the operon was evaluated by RT-PCR for
 22 *ibeR* (**B**) and *ibeT* (**C**). The non pathogenic *E. coli* K12 strain MG1655 was used as a negative control. 16S
 23 ribosomal RNA was used as internal expression control.

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30 **SUPPLEMENTAL FIGURE 3. Generation of M-like cells.** Fourteen days after polarization, Caco-2 cells
 31 were co-cultured with Raji B cells to generate M-like cells. Representative TEM of Caco-2 monolayers **(A)**
 32 and M-like cells **(B)** are shown with magnified images of selected areas underneath **(C and D)**. Regions
 33 devoid of microvilli are observed in M-like cells. These regions were not observed in Caco-2 mono-
 34 cultures.

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