

**Supplementary Table 1.** Bacterial Strains and Plasmids Used in This Study

Strains and plasmid	Relevant characteristics	Reference
Strains		
atEc	Wild type	Yoon et al. (2016) <sup>4</sup>
JB-01	atEc- $\Delta$ adhE transformed with pKM212-ter-crt and pKA312-tesB-hbd-atoB	This study
JB-02	atEc- $\Delta$ ldhA transformed with pKM212-ter-crt and pKA312-tesB-hbd-atoB	This study
JB-03	atEc- $\Delta$ ackA transformed with pKM212-ter-crt and pKA312-tesB-hbd-atoB	This study
JB-04	atEc- $\Delta$ poxB transformed with pKM212-ter-crt and pKA312-tesB-hbd-atoB	This study
JB-05	atEc- $\Delta$ frdB transformed with pKM212-ter-crt and pKA312-tesB-hbd-atoB	This study
JB-06	atEc- $\Delta$ poxB::ter $\Delta$ ldhA::hbd transformed with pKM212-ter-crt-tesB and pKA312-hbd-atoB	This study
JB-07	atEc- $\Delta$ ackA::crt $\Delta$ poxB::ter $\Delta$ ldhA::hbd transformed with pKM212-ter-crt-tesB and pKA312-hbd-atoB	This study
atEc-But	atEc- $\Delta$ poxB transformed with pKM212-ter-crt-tesB and pKA312-hbd-atoB	This study
Plasmids		
pKA312-hbd-atoB	pKA312 derivative; tac promoter, <i>C. acetobutylicum</i> hbd gene and <i>E. coli</i> atoB gene, <i>Ralstonia eutropha</i> PHA biosynthesis genes transcription terminator; Cm <sup>R</sup>	This study
pKM212-ter-crt-tesB	pKM212-MCS derivative; tac promoter, <i>T. denticola</i> tergene, <i>C. acetobutylicum</i> crt gene and <i>E. coli</i> tesB gene <i>Ralstonia eutropha</i> PHA biosynthesis genes transcription terminator; Km <sup>R</sup>	This study
pKA312-tesB-hbd-atoB	pKA312 derivative; tac promoter, <i>E. coli</i> tesB gene, <i>C. acetobutylicum</i> hbd gene and <i>E. coli</i> atoB gene, <i>Ralstonia eutropha</i> PHA biosynthesis genes transcription terminator; Cm <sup>R</sup>	This study
pKM212-ter-crt	pKM212-MCS derivative; tac promoter, <i>T. denticola</i> tergene, <i>C. acetobutylicum</i> crt gene, <i>Ralstonia eutropha</i> PHA biosynthesis genes transcription terminator; Km <sup>R</sup>	This study

atEc, atypical *Escherichia coli*.