

## Supplementary Material

**Table S1.** Primers employed for detection of virulence genes.

Gene	Primer (5'-3')	Product Size (bp)	Reference
<i>escV</i>	ATTCTGGCTCTCTTCTTATGGCT G CGTCCCCTTTACAAACTCATCGC	544	Muller et al. (2007)
<i>ent</i>	TGGGCTAAAAGAAGACACACTG CAAGCATCCTGATTATCTCACC	629	Muller et al. (2007)
<i>eaeA</i>	GACCCGGCACAAAGCATAAGC CCACCTGCAGCAACAAGAGG	384	Paton et al. (2002)
<i>bfpB</i>	GACACCTCATGCTGAAGTCG CCAGAACACCTCCGTTATGC	910	Muller et al. (2007)
<i>stx1</i>	ATAAAATGCCATTGTTGACTAC AGAACGCCACTGAGATCATC	180	Paton et al. (2002)
<i>stx2</i>	GGCACTGTCTGAAACTGCTCC TCGCCAGTTATCTGACATTCTG	255	Paton et al. (2002)
<i>hlyA</i>	GCATCATCAAGCGTACGTTCC AATGAGCCAAGCTGGTTAACGT	534	Paton et al. (2002)
<i>saa</i>	CGTGATGAACAGGCTATTGC ATGGACATGCCTGTGGCAAC	119	Antikainen et al. (2009)
<i>invE</i>	CGATAGATGGCGAGAAATTATATCC CG CGATCAAGAACCTAACAGAAGA ATCAC	766	Muller et al. (2007)
<i>astA</i>	TGCCATCAACACAGTATATCCG ACGGCTTGTAGCCTTCCAT	102	Muller et al. (2007)
<i>aggR</i>	ACGCAGAGTTGCCTGATAAAG AATACAGAACATCGTCAGCATCAGC	400	Muller et al. (2007)
<i>pic</i>	AGCCGTTCCGCAGAACGCC AAATGTCAGTGAACCGACGATTGG	1111	Muller et al. (2007)
<i>elt</i>	GAACAGGAGGTTCTGCCTTAGGTG CTTCAATGGCTTTTTGGAGTC	655	Muller et al. (2007)
<i>estIa</i>	CCTTTTAGYCAGACARCTGAATCA STTG CAGGCAGGATTACAACAAAGTTCAC AG	157	Muller et al. (2007)
<i>estIb</i>	TGTCTTTTACACCTTCGCTC CGGTACAAGCAGGATTACAACAC	171	Muller et al. (2007)

**Table S1:** Primers employed for detection of antimicrobial resistance genes.

Gene	Primer (5'-3')	Product Size (bp)	Reference
<i>bla<sub>TEM</sub></i>	GTGGACAAAGGTACAACGAG	857	(Maynard et al., 2003)
	CGGTAAAGTCGTCACACAC		
<i>bla<sub>CMY-2</sub></i>	GACAGCCTCTTCTCCACA	1000	(Maynard et al., 2003)
	TGGACACGAAGGCTACGTA		
<i>strA/strB</i>	ATGGTGGACCCTAAAATCT	891	(Maynard et al., 2003)
	CGTCTAGGATCGAGACAAAG		
<i>aadA1</i>	GTGGATGGCGGCCTGAAGCC	525	(Maynard et al., 2003)
	AATGCCAGTCGGCAGCG		
<i>tet(A)</i>	GCTACATCCTGCTGCCTC	210	(Dahshan, Shahada, Chuma, Moriki, & Okamoto, 2010)
	CATAGATGCCGTGAAGAGG		
<i>tet(B)</i>	TTGGTTAGGGCAAGTTTG	659	(Dahshan et al., 2010)
	GTAATGGCCAATAACACCG		
<i>tet(G)</i>	GCTCGGTGGTATCTCTGCTC	468	(Dahshan et al., 2010)
	AGCAACAGAACATCGGAACAC		
<i>sul1</i>	TGGTGACGGTGTTCGGCATTC	789	(Costa et al., 2008)
	GCGAGGGTTCCGAGAAGGTG		
<i>sul2</i>	CGGCATCGTAAACATAACC	722	(Costa et al., 2008)
	GTGTGCGGATGAAAGTCAG		
<i>sul3</i>	GAGCAAGATTTGGAATCG	792	(Costa et al., 2008)
	CATCTGCAGCTAACCTAGGGTTGGA		

**Table S2:** Phenotypic and genotypic profiles of tested *E. coli* isolates

Isolate N°	Antimicrobial Resistance Profile	Antimicrobial Resistance Genes	Virulence Genes	Pathotype
C1	AM AMC KF	<i>sul2 strA/strB tet(B)</i>	<i>hlyA saa</i>	NC
C2	AM AMC KF TE	<i>sul2</i>		
C3	AMC KF		<i>stx1 stx2 hlyA</i>	EHEC
C4	AMC KF	<i>sul1 sul2</i>	<i>stx2 hlyA</i>	EHEC
C5	AM AMC KF	<i>tetA</i>	<i>stx2 hlyA astA aggR</i>	EHEC / EAEC
C6	KF			
C7	AMC	<i>blaCMY-2 sul1 tet(G)</i>	<i>stx2 hlyA astA</i>	EHEC
C8	AM AMC KF	<i>blaCMY-2 sul2 tet(G)</i>	<i>astA</i>	EAEC
C11	AM AMC KF		<i>pic</i>	EAEC
C12	AMC FOX KF CTX TE ATM	<i>sul2</i>	<i>hlyA</i>	NC
C14	AM AMC KF	<i>sul1 sul2 tet(B)</i>	<i>stx1 stx2 hlyA</i>	EHEC
C15	AMC KF ENR	<i>tetB</i>	<i>stx1 hlyA</i>	EHEC
C16	AM AMC FOX KF CTX TE ENR ATM	<i>sul2</i>	<i>stx2</i>	STEC
C17		<i>blaCMY-2 sul2 tet(G)</i>	<i>hlyA</i>	NC
C18	AM AMC KF	<i>sul1 sul2 sul3 tet(B)</i>		
C19	AM AMC KF	<i>sul2 tetG</i>		
C20	AM AMC FOX KF CTX ENR CN ATM	<i>sul1 tet(A) tet(G)</i>	<i>hlyA</i>	NC
C21	AM AMC FOX KF CTX ENR ATM	<i>sul2 sul3 tet(G)</i>	<i>eaeA hlyA astA</i>	EAEC/aEPEC
C22	AM AMC FOX KF CTX CN ATM	<i>sul2</i>	<i>eae stx1 hlyA</i>	EHEC
C23	AM KF	<i>sul2 tetG</i>		
C24	AM AMC FOX KF CTX TE CN ATM	<i>blaCMY-2 sul1 tet(B) tet(G)</i>		
C25	AM AMC FOX KF CTX TE ENR ATM	<i>blaCMY-2 sul1 tet(B)</i>		
C26	AMC FOX KF CTX TE ATM	<i>sul1</i>		
C27	AM AMC FOX KF CTX TE CN ATM	<i>blaCMY-2 sul1 tet(G)</i>		
C28	AM AMC FOX KF CTX TE ENR CN ATM	<i>blaCMY-2 sul1 sul2 tet(G)</i>		
C29	AM AMC KF	<i>blaCMY-2 tet(G)</i>	<i>stx1 astA</i>	STEC

C30	AM AMC FOX KF CTX TE CN ATM	<i>bla<sub>CMY-2</sub></i> <i>sul1 sul2 tet(G)</i>	<i>hlyA astA</i>	NC
C31	AM AMC KF	<i>bla<sub>CMY-2</sub></i> <i>tet(G)</i>	<i>hlyA astA</i>	NC
C32	AM AMC KF	<i>bla<sub>CMY-2</sub></i> <i>tet(G)</i>	<i>hlyA astA</i>	NC
C33	AMC KF	<i>tet(A) tet(G)</i>	<i>eaeA hlyA astA</i>	EAEC/aEPEC
C34	AM AMC FOX KF CTX TE ENR ATM	<i>tet(B)</i>	<i>astA</i>	EAEC
C35	AM FOX KF CTX ENR CN ATM	<i>sul2</i>		
C36	AM AMC FOX KF CTX			
C37		<i>bla<sub>CMY-2</sub></i> <i>sul2 tet(G)</i>	<i>hlyA</i>	NC
C38	AM AMC KF TE	<i>sul2 strA/strB tet(G)</i>	<i>eaeA astA</i>	EPEC/EAEC
C39	AMC KF	<i>sul2 sul3 tet(B)</i>	<i>hlyA astA</i>	NC
C41	AM AMC FOX KF CTX CN ATM	<i>sul2</i>		
C43	AM AMC FOX KF CTX TE ENR CN ATM	<i>sul1 sul2 tet(G)</i>	<i>hlyA</i>	NC
C45	AM AMC KF	<i>tetG</i>		
C46	AM KF	<i>sul2 tetG</i>		
C47	AM AMC KF TE			
C48	AMC KF CTX CN ATM	<i>strA/strB tetA tetG</i>		
C49	AM AMC FOX KF CTX TE CN ATM			
C50	AM AMC FOX KF ATM	<i>sul1 sul2</i>		
C51	AM AMC KF TE	<i>sul3</i>	<i>eaeA stx2 hlyA</i>	EHEC
C52	AM AMC FOX KF TE ENR	<i>sul2</i>	<i>hlyA astA</i>	NC
C53	AM AMC KF			
C54	AMC FOX KF CTX ENR CN ATM			
C55	AM AMC FOX KF TE	<i>tetB</i>	<i>hlyA astA</i>	NC
C56	AM AMC KF TE	<i>sul1</i>		
C57	AM AMC FOX KF CTX TE ENR CN ATM		<i>stx1 hlyA</i>	EHEC
C58	AMC KF TE	<i>tetA</i>		
C59	AM AMC KF CTX TE	<i>bla<sub>CMY-2</sub></i> <i>sul1 sul2 tet(G)</i>	<i>eaeA hlyA escV astA</i> <i>aggR</i>	EAEC/aEPEC
C60	FOX KF CTX TE ATM		<i>pic</i>	EAEC
C61	AMC FOX KF CTX TE CN ATM	<i>sul2 tet(B)</i>	<i>eaeA pic</i>	EPEC/EAEC

C62	AM AMC FOX KF CTX CN ATM	<i>tetB</i>	<i>hlyA astA</i>	NC
C63	AM AMC FOX KF CTX CN ATM	<i>tetB</i>		
C64	AM AMC KF	<i>tetA</i>		
C65	AM AMC KF	<i>sul2 tetG</i>		
C67	AM AMC KF ENR	<i>sul2</i>		
C70	AM AMC KF ENR			
C71	AM AMC FOX KF CTX TE SXT ENR CN ATM	<i>sul1 sul2</i>		
C72	AM AMC KF	<i>bla<sub>CMY-2</sub> sul1</i>	<i>stx2 hlyA</i>	EHEC
C73	AM FOX KF CTX CN ATM	<i>bla<sub>CMY-2</sub> tet(G)</i>	<i>stx2 astA</i>	STEC
C74	AM FOX KF CTX TE ATM	<i>bla<sub>CMY-2</sub></i>		
C75	AM KF ENR	<i>sul1 sul2 tet(G)</i>	<i>stx2</i>	STEC
C76	AM AMC FOX KF	<i>bla<sub>CMY-2</sub></i>	<i>stx2</i>	STEC
C77	KF CTX ATM	<i>sul2 tet(B)</i>	<i>stx2 hlyA</i>	EHEC
C78	AM AMC KF			
C79	AM AMC FOX KF CTX	<i>sul2</i>	<i>hlyA</i>	NC
C81	AM AMC FOX KF	<i>sul2</i>		
C82	TE	<i>sul1</i>		
C83	AM AMC FOX KF CTX TE	<i>tetB</i>	<i>eaeA</i>	aEPEC
C84	AM AMC FOX KF TE		<i>hlyA saa</i>	NC
C85	AM AMC KF TE			
C87	AM AMC KF TE	<i>sul1 sul2 strA/strB tet(G)</i>		
C89	AM AMC KF	<i>sul2</i>		
C90	AM AMC KF CTX TE SXT ENR ATM	<i>strA/strB tetA tetG</i>		
C91	AM AMC FOX KF		<i>stx2 astA</i>	STEC
C92	AM AMC FOX KF TE	<i>bla<sub>CMY-2</sub> sul2 aadA1</i>	<i>eaeA</i>	aEPEC
C93	AMC TE	<i>bla<sub>CMY-2</sub> sul1 sul2</i>	<i>astA</i>	EAEC
C94	AMC FOX KF	<i>bla<sub>CMY-2</sub> sul1 sul2 tet(G)</i>	<i>eaeA escV astA aggR</i>	EHEC/EAEC
C95	AM AMC KF TE		<i>stx2 astA</i>	STEC
C96	AMC	<i>bla<sub>CMY-2</sub> aadA1 tet(G)</i>	<i>hlyA</i>	NC
C97	AMC KF	<i>sul1 sul2 aadA1 tet(B)</i>	<i>stx1 stx2</i>	STEC
C98	KF	<i>bla<sub>CMY-2</sub> sul1 sul2 aadA1 tet(G)</i>	<i>stx2 astA aggR</i>	STEC/EAEC
C99	AM AMC KF ENR	<i>bla<sub>CMY-2</sub> sul1 sul2</i>	<i>hlyA astA</i>	NC
C100	AMC KF	<i>bla<sub>CMY-2</sub> sul1 tet(G)</i>	<i>hlyA</i>	NC





C178	AM AMC KF TE	<i>bla<sub>CMY-2</sub></i> <i>sul1</i> <i>aadA1</i> <i>tet(A)</i>	<i>hlyA</i>	NC
C179	AM AMC KF TE	<i>bla<sub>CMY-2</sub></i> <i>aadA1</i>	<i>eae</i> <i>stx1</i> <i>stx2</i> <i>hlyA</i>	EHEC
C180	AMC KF	<i>bla<sub>CMY-2</sub></i>	<i>eae</i> <i>stx1</i> <i>hlyA</i>	EHEC
C181	AMC FOX KF TE	<i>bla<sub>CMY-2</sub></i> <i>aadA2</i>	<i>eae</i> <i>stx1</i> <i>hlyA</i>	EHEC
C182	AMC	<i>bla<sub>CMY-2</sub></i> <i>sul2</i>	<i>eae</i> <i>stx1</i> <i>hlyA</i>	EHEC
C183	AMC KF	<i>bla<sub>CMY-2</sub></i> <i>sul1</i> <i>aadA1</i>	<i>eae</i> <i>stx1</i> <i>hlyA</i> <i>astA</i> <i>pic</i>	EHEC/EAEC
C184	AMC KF	<i>bla<sub>CMY-2</sub></i>	<i>eae</i> <i>stx1</i> <i>hlyA</i> <i>astA</i> <i>pic</i>	EHEC/EAEC
C185	AMC	<i>bla<sub>CMY-2</sub></i>	<i>eae</i> <i>stx1</i> <i>hlyA</i>	EHEC
C186	AM AMC KF	<i>bla<sub>CMY-2</sub></i> <i>sul2</i>	<i>eae</i> <i>stx1</i> <i>hlyA</i>	EHEC
C187	AM AMC KF	<i>bla<sub>CMY-2</sub></i> <i>aadA1</i> <i>tet(A)</i>	<i>stx1</i> <i>stx2</i> <i>hlyA</i>	EHEC
C189	AMC KF	<i>bla<sub>CMY-2</sub></i> <i>tet(A)</i>	<i>astA</i>	EAEC
C190	KF TE			
C191	AMC KF		<i>eaeA</i> <i>hlyA</i>	aEPEC
C192	KF	<i>bla<sub>CMY-2</sub></i> <i>aadA1</i>	<i>hlyA</i> <i>astA</i>	NC
C193	KF		<i>hlyA</i> <i>astA</i>	NC
C194	AM AMC FOX KF C TE SXT		<i>eae</i> <i>stx1</i> <i>stx2</i>	EHEC
C195	AMC KF	<i>bla<sub>CMY-2</sub></i>		
C197	AM AMC KF		<i>astA</i>	EAEC
C198	KF ATM	<i>bla<sub>CMY-2</sub></i>	<i>eae</i> <i>stx1</i> <i>stx2</i> <i>hlyA</i> <i>escV</i>	EHEC
C199	AM AMC KF TE		<i>stx1</i> <i>stx3</i>	STEC
C200			<i>hlyA</i> <i>astA</i>	NC

Legend: AM = ampicillin; AMC = amoxicillin/clavulanic acid; FOX = cefoxitin; KF = cephalothin; CTX = cefotaxime; C = chloramphenicol; TE = tetracycline; SXT = trimethoprim/sulfamethoxazole; ENR = enrofloxacin; CN = gentamicin; S = streptomycin; IPM = imipenem; ATM = aztreonam; NC = Not classifiable