

1 **Table S1.** Primers used in this study for amplification of the virulence factors of pathogens of *Escherichia coli*

Virulence factor	Primers	Pathotype	T_a(°C)^a	Amplicon (bp)	Oligonucleotide sequence (5'--> 3')	Reference
β -D-GUD	<i>uidA</i> -F	All	55	168	TGTGCCRGGMAGTTTAAC	this study
	<i>uidA</i> -R				TGATTATTKACCCACACTTG	
Shiga toxin 1	<i>stx1</i> -F	EHEC	55	107	GCAAAGAMGTATGTWGATTG	this study
	<i>stx1</i> -R				GWGCCACTATCAATCATCAG	
Shiga toxin 2	<i>stx2</i> -F	EHEC	55	82	AATGCAAATCAGTCGTAC	this study
	<i>stx2</i> -R				TGCATCTCTGGTCATTGTAT	
Shiga toxin 2 (variant)	<i>stx2</i> -F var	EHEC	55	82	GATGCAGATTRRKCGYCAT	this study
	<i>stx2</i> -R var				TGATGCGCGGGTCATGGAAC	
Intimin	<i>eae</i> -F	EHEC/EPEC	52	92	GCTATAACRTCTTCATTGATC	this study
	<i>eae</i> -R				RCTACTTTTRAATAGTCTCG	
Enterohaemolysin	<i>ehxA</i> -F	EHEC/EPEC	55	86	GCACCACAACTTGAYAAACT	this study
	<i>ehxA</i> -R				CCAGATTATTACCTACATTYTCAG	
ST	<i>est</i> -F	ETEC	54	69/72	TGAAAGCATGAATRGTAGCAA	this study
	<i>est</i> -R				TTAATAACATSSAGCACAGG	
ST variant	<i>est</i> -F var	ETEC	54	69/73	TCAGAAAATATGAAYAACACATT	this study
	<i>est</i> -R var				TAATAGCACCCGGTACAAG	

		<i>elt</i> -F			GGYAAAAGAGAAATGGTTAT	
LT		<i>elt</i> -R	ETEC	54	142	TCTCGGTCAAGATATGYGATT ^a
		<i>bfpA</i> -F	EPEC	53	109	CMGGTGTGATGTTTACTAC
Bundle- forming pilus (<i>bfpA</i>)		<i>bfpA</i> -R			TGCCCAATATACARACCAT	this study
		<i>pInv</i> -F	EIEC	53	159	CCAATCACAAATATCAGTACCA
Invasion plasmid (<i>spa24</i>)		<i>pInv</i> -R			AAAGAGCCTTATTACCCATAT	this study
		<i>aggR</i> -F	EAEC	56	94	TTTATCGCAATCAGATTAARC
Enteropathogenic regulator		<i>aggR</i> -R			GGACAACTRCAAGCATCTAC	this study
	<i>rbf</i> _{O157}	<i>rbf</i> _{O157} -F	EHEC	55	125	CAAAAGGAAACTATATTCAAAGT
		<i>rbf</i> _{O157} -R			CGATATACTAACGCTAACAA ⁽¹⁸⁾	
	<i>fliC</i> _{H7}	<i>fliC</i> _{H7} -F	EHEC	55	91	CGACAGGTCTTATGATCTGA
		<i>fliC</i> _{H7} -R			ACTGTGACTTTATGCCATT ⁽¹⁸⁾	
	<i>wzxO</i> ₁₀₄	<i>wzxO</i> ₁₀₄ -F	EAEC	55	99	GCGCAAAGAATTCAACTT
		<i>wzxO</i> ₁₀₄ -R			TGTAAAATCCTTAAACTATACG ⁽¹⁹⁾	
	<i>fliC</i> _{H4}	<i>fliC</i> _{H4} -F	EAEC	55	192	CTGGGGGTAAACAAGTCAA
		<i>fliC</i> _{H4} -R			CCAGTGCTTTAACGGATC ⁽¹⁹⁾	

2 ^aT_a, annealing temperature¹

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4 **Table S2.** Antimicrobial resistance rates found in *Escherichia coli* isolates depending on the host species.

Antimicrobial	Concentration range (mg/L)	Cut-off ^a	Pigs		Broiler		Cattle			
			Non-O157:H7 ^b (n=278) ^c		Non-O157:H7 (n=196)		Non-O157:H7		O157:H7	
			NR	%R	NR	%R	NR	%R	NR	%R
Ampicillin	0.5-32	8	192	69.1	139	70.9	40	15.6	17	34.0
Cefotaxime	0.06-4	0.25	3	1.1	51	26.0	0	0.0	0	0.0
Ceftazidime	0.25-16	0.5	4	1.4	45	23.0	0	0.0	0	0.0
Nalidixic Acid	4-64	16	51	18.3	164	83.7	8	3.1	17	34.0
Ciprofloxacin	0.008-8	0.06	81	29.1	169	86.2	9	3.5	17	34.0
Streptomycin	2-128	16	211	75.9	133	67.9	91	35.5	32	64.0
Kanamycin	4-128	8	45	16.2	24	12.2	7	2.7	13	26.0
Gentamicin	0.25-32	2	20	7.2	20	10.2	8	3.1	17	34.0
Chloramphenicol	2-64	16	76	27.3	37	18.9	25	9.8	18	36.0
Florphenicol	2-64	16	5	1.8	1	0.5	15	5.9	1	2.0

Tetracycline	1-64	8	251	90.3	147	75.0	125	48.8	32	64.0
Sulphonamide	8-1024	64	195	70.1	105	53.6	90	35.2	32	64.0
Trimethoprim	0.5-32	2	198	71.2	93	47.4	45	17.6	32	64.0
Colistin	2-4	2	0	0.0	0	0.0	0	0.0	0	0.0

5 Abbreviations: NR, number of resistant isolates; %R, percentage of resistant isolates; NA, Not applicable.

6 ^a EUCAST cut-off values (http://www.eucast.org/mic_distributions/)

7 ^b Non-O157:H7: *E. coli* belonging to other serotypes different than O157:H7.

8 ^c For colistin in pigs only 156 isolates were tested.