

Figure S1 Amplification of *fosA* (A), *fosA3* (B) and *fosA7.5* (C) genes of some strains
 Note: M: DL 2000 DNA Marker; 1-3 Lanes: *fosA* like genes-positive strains

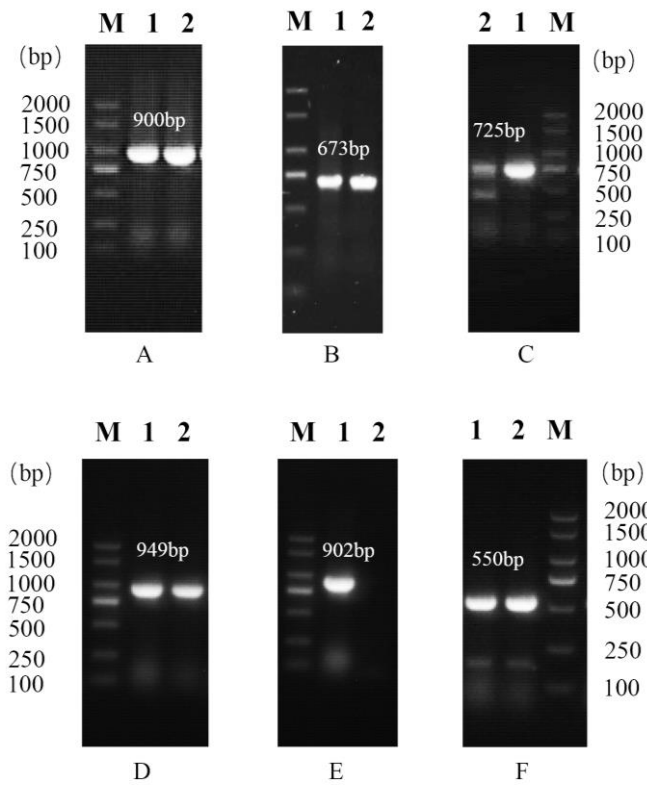


Figure S2 Electrophoresis results of *bla_{NDM}* (A), *floR* (B), *rmtB* (C), *bla_{CTX-M-1}* (D), *bla_{CTX-M-9}* (E) and *bla_{TEM}* (F) genes of strains
 Note: M: DL 2000 DNA Marker; 1-2 Lanes: fosfomycin-resistant strains

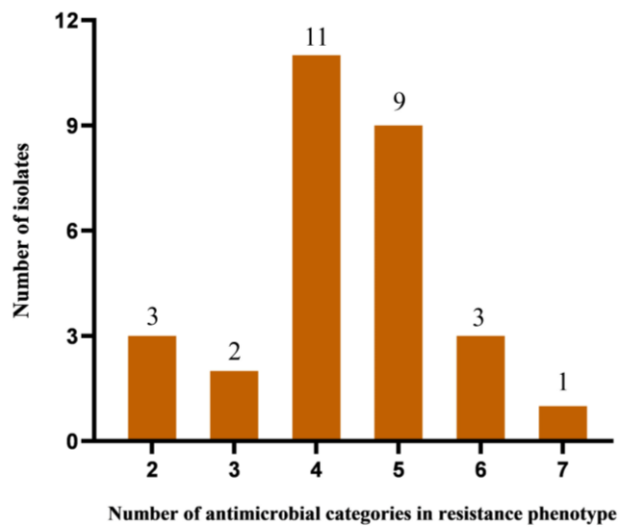


Figure S3 The number of strains of 29 conjugations in different resistant type

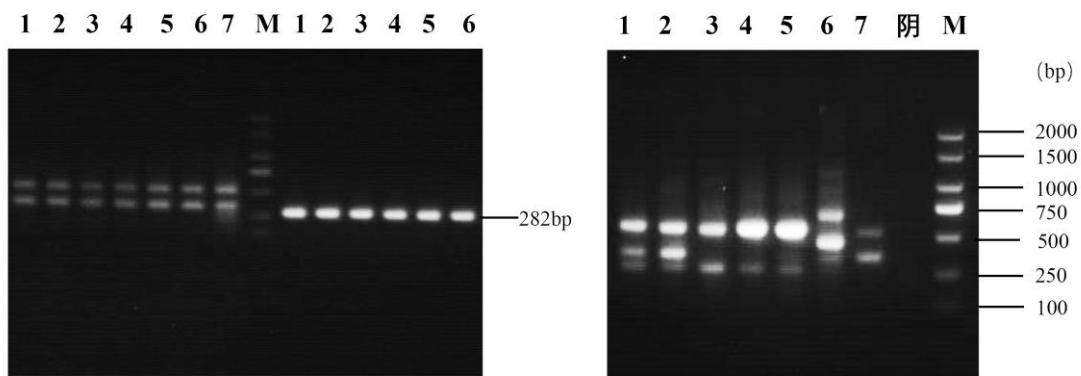


Figure S4 Electrophoresis results of C600, conjugations ERIC-PCR and *fosA3* of conjugations (left); ERIC-PCR electrophoresis results of donor isolates and C600 (right)
 Note: M: DL 2000 DNA Marker; 1-7: E27-T, E28-T, E29-T, E30-T, E31-T, fEC.1-T, C600

Table S1 Information of 82 strains carrying fosfomycin resistance genes

Strains	Species	sources	<i>fosA</i> -like gene	Strains	Species	sources	<i>fosA</i> -like gene
EC1	<i>E. coli</i>	pigeon	<i>fosA3</i>	EC42	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC2	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC43	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC3	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC44	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC4	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC45	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC5	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC46	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC6	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC47	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC7	<i>E. coli</i>	pig, sewage	<i>fosA3</i>	EC48	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC8	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC49	<i>E. coli</i>	pig, nose	<i>fosA3</i>
EC9	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC50	<i>E. coli</i>	chicken, mouth	<i>fosA3</i>
EC10	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC51	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC11	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	EC52	<i>E. coli</i>	chicken, feces	<i>fosA3</i>
EC12	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 1	<i>E. hormaechei</i>	pig, soil	<i>fosA</i>
EC13	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 2	<i>E. cloacae</i>	chicken, soil	<i>fosA</i>
EC14	<i>E. coli</i>	pig, feces	<i>fosA3</i>	EC2088	<i>E. hormaechei</i>	chicken, feces	<i>fosA</i>
EC15	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 4	<i>E. hormaechei</i>	chicken, feces	<i>fosA</i>
EC16	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 5	<i>E. hormaechei</i>	chicken, soil	<i>fosA</i>
EC17	<i>E. coli</i>	pig, lungs	<i>fosA3</i>	20E. 6	<i>E. cloacae</i>	pig, sewage	<i>fosA</i>
EC18	<i>E. coli</i>	pigeon	<i>fosA3</i>	20E. 7	<i>E. asburiae</i>	chicken, soil	<i>fosA</i>
EC19	<i>E. coli</i>	pig, mouth	<i>fosA3</i>	20E. 8	<i>E. asburiae</i>	chicken, soil	<i>fosA</i>
EC20	<i>E. coli</i>	pig, lungs	<i>fosA3</i>	20E. 9	<i>E. asburiae</i>	chicken, feces	<i>fosA</i>
EC21	<i>E. coli</i>	pig, feces	<i>fosA3</i>	EC2098	<i>E. hormaechei</i>	chicken, feces	<i>fosA</i>
EC22	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 11	<i>E. cloacae</i>	pig, soil	<i>fosA</i>
EC23	<i>E. coli</i>	pig, mouth	<i>fosA3</i>	KP20117	<i>E. cloacae</i>	pig, soil	<i>fosA</i>
EC24	<i>E. coli</i>	pigeon	<i>fosA3</i>	20E. 13	<i>E. cloacae</i>	pig, mouth	<i>fosA</i>
EC25	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 14	<i>E. cloacae</i>	pig, feces	<i>fosA</i>
EC26	<i>E. coli</i>	pig, mouth	<i>fosA3</i>	20E. 15	<i>E. cloacae</i>	pig, lungs	<i>fosA, fosA3</i>
EC27	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 16	<i>E. cloacae</i>	egg shell	<i>fosA, fosA3</i>
EC28	<i>E. coli</i>	pig, sewage	<i>fosA3</i>	20E. 17	<i>E. cloacae</i>	chicken, soil	<i>fosA</i>
EC29	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	20E. 18	<i>E. hormaechei</i>	pig, nose	<i>fosA</i>
EC30	<i>E. coli</i>	pig, anus	<i>fosA3</i>	EC1928	<i>E. hormaechei</i>	pig, feces	<i>fosA</i>
EC31	<i>E. coli</i>	pig, nose	<i>fosA3</i>	20E. 20	<i>E. cloacae</i>	chicken, soil	<i>fosA</i>
EC32	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	Kpg84	<i>E. coli</i>	pigeon	<i>fosA3, fosA7.5</i>
EC33	<i>E. coli</i>	pig, soli	<i>fosA3</i>	fEc. 1	<i>E. coli</i>	pigeon	<i>fosA3, fosA7.5</i>
EC34	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	ECg85	<i>E. coli</i>	pigeon	<i>fosA3, fosA7.5</i>
EC35	<i>E. coli</i>	pig, mouth	<i>fosA3</i>	fEcg99-1	<i>E. coli</i>	pigeon	<i>fosA7.5</i>
EC36	<i>E. coli</i>	pig, lungs	<i>fosA3</i>	ECg29	<i>E. coli</i>	pigeon	<i>fosA7.5</i>
EC37	<i>E. coli</i>	pig, feces	<i>fosA3</i>	ECg931	<i>E. coli</i>	pigeon	<i>fosA7.5</i>
EC38	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	ECg932	<i>E. coli</i>	pigeon	<i>fosA7.5</i>
EC39	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	ECg91	<i>E. coli</i>	pigeon	<i>fosA7.5</i>
EC40	<i>E. coli</i>	chicken, feces	<i>fosA3</i>	ECg933	<i>E. coli</i>	pigeon	<i>fosA7.5</i>
EC41	<i>E. coli</i>	pig, nose	<i>fosA3</i>	EC315	<i>E. coli</i>	pigeon	<i>fosA7.5</i>

Table S2 MICs ($\mu\text{g/mL}$) of 12 antimicrobial agents for 52*fosA3*-carrying strains

Strains	CAZ	FFC	CHL	TET	CIP	AMK	MEM	COL	TGC	RIF	FOS
EC1	32	256	128	128	8	2	<1	<1	0.5	3.9	>512
EC2	16	32	16	512	512	4	<1	<1	1	31.2	>512
EC3	64	>512	>512	512	16	<1	<1	<1	2	500	>512
EC4	16	256	128	128	16	4	<1	<1	0.5	250	>512
EC5	8	>512	512	512	128	4	<1	<1	1	15.625	>512
EC6	16	>512	512	512	256	2	<1	<1	2	15.625	>512
EC7	<1	256	128	32	<1	<1	<1	<1	<0.25	7.8	>512
EC8	16	128	64	8	8	<1	<1	<1	0.5	125	>512
EC9	32	256	256	64	16	<1	<1	<1	<0.25	7.8	>512
EC10	<1	512	512	64	<1	<1	<1	<1	<0.25	7.8	>512
EC11	<1	512	256	128	2	<1	<1	<1	<0.25	7.8	>512
EC12	<1	32	128	16	64	<1	<1	>512	4	15.625	>512
EC13	16	256	128	16	16	4	<1	<1	0.5	125	>512
EC14	8	512	512	512	128	4	<1	<1	1	31.25	>512
EC15	8	>512	512	512	256	2	<1	<1	1	31.25	>512
EC16	<1	128	64	32	4	2	<1	<1	<0.25	7.8	>512
EC17	128	>512	512	64	128	>512	<1	<1	2	7.8	>512
EC18	16	512	512	32	32	4	<1	<1	<0.25	3.9	>512
EC19	<1	>512	256	16	16	<1	<1	<1	0.5	15.625	>512
EC20	128	>512	512	128	256	>512	<1	<1	0.5	7.8	>512
EC21	32	512	256	256	128	2	<1	<1	<0.25	15.625	>512
EC22	128	>512	128	256	256	>512	<1	<1	1	7.8	>512
EC23	128	>512	512	128	256	>512	<1	<1	1	7.8	>512
EC24	<1	16	128	16	32	<1	<1	>512	8	15.625	>512
EC25	<1	128	64	32	8	<1	<1	<1	<0.25	3.9	>512
EC26	128	>512	512	128	128	>512	<1	<1	2	7.8	>512
EC27	<1	256	64	64	16	<1	<1	0.5	<0.25	7.8	512
EC28	2	256	64	128	8	2	<1	1	<0.25	3.9	>512
EC29	32	256	64	64	8	<1	<1	<1	1	7.8	512
EC30	32	512	128	256	<1	2	<1	2	<0.25	7.8	512
EC31	32	512	128	128	<1	2	<1	0.5	<0.25	7.8	>512
EC32	32	256	64	64	16	8	<1	0.5	2	3.9	>512
EC33	64	256	128	64	32	2	<1	0.5	<0.25	7.8	>512
EC34	<1	256	64	128	4	<1	<1	<1	1	3.9	>512
EC35	<1	>512	128	256	16	<1	<1	<1	1	15.625	>512
EC36	32	>512	256	128	64	>512	<1	1	<0.25	7.8	>512
EC37	64	>512	512	512	64	2	<1	1	<0.25	7.8	>512
EC38	<1	512	256	256	2	2	<1	0.5	<0.25	7.8	512
EC39	16	512	128	512	128	<1	<1	<1	2	7.8	>512
EC40	16	>512	256	512	256	<1	<1	1	<0.25	7.8	>512
EC41	32	>512	256	512	32	<1	<1	<0.25	2	3.9	>512
EC42	<1	256	64	64	16	<1	<1	<1	<0.25	7.8	>512

EC43	16	128	64	64	32	4	<1	2	1	7.8	>512
EC44	16	512	128	64	8	4	<1	0.5	<0.25	7.8	>512
EC45	32	512	64	128	64	2	<1	<0.25	<0.25	3.9	>512
EC46	16	>512	256	512	256	2	<1	2	<0.25	15.625	>512
EC47	8	512	128	64	32	<1	<1	<1	1	3.9	>512
EC48	16	512	128	128	64	4	<1	1	<0.25	3.9	>512
EC49	32	>512	256	512	16	<1	<1	<0.25	<1	3.9	>512
EC50	<1	256	128	128	32	<1	<1	<0.25	0.5	7.8	>512
EC51	<1	256	64	128	4	<1	<1	<1	2	3.9	>512
EC52	8	>512	256	256	2	>512	<1	<1	2	7.8	512

Tabl3 S3 MICs ($\mu\text{g/mL}$) of 12 agents for 20 *fosA*-carryings and 10 *fosA7.5*-carrying strains

Strains	CAZ	FFC	CHL	TET	CIP	AMK	MEM	COL	TGC	RIF	FOS
20E.1	<1	8	8	8	<1	<1	<1	<1	1	15.625	>512
20E.2	<1	8	4	8	<1	<1	<1	<1	2	15.625	>512
EC2088	<1	512	128	128	<1	<1	<1	<1	4	>1000	>512
20E.4	<1	512	128	256	<1	<1	<1	<1	4	1000	>512
20E.5	<1	512	128	256	<1	<1	<1	<1	4	1000	>512
20E.6	<1	8	8	8	<1	<1	<1	64	2	15.625	>512
20E.7	<1	2	4	8	<1	<1	<1	64	2	15.625	>512
20E.8	<1	8	8	16	<1	<1	<1	32	2	15.625	>512
20E.9	2	>512	256	256	4	<1	<1	<1	0.5	>512	>512
EC2098	<1	512	128	64	<1	<1	<1	<1	1	7.8	512
20E.11	2	512	128	128	<1	<1	<1	2	2	31.25	>512
KP20117	16	512	256	512	8	2	<1	64	2	500	>512
20E.13	32	512	512	512	8	<1	<1	64	16	500	>512
20E.14	256	>512	>512	>512	>512	>512	<1	<1	0.5	500	>512
20E.15	<1	32	128	16	64	<1	<1	>512	4	15.625	>512
20E.16	128	512	128	512	<1	<1	<1	64	8	>1000	>512
20E.17	>512	<1	<1	128	<1	<1	8	<1	0.5	7.8	>512
20E.18	<1	512	256	256	4	4	<1	<1	2	500	>512
EC1928	<1	8	2	8	<1	<1	<1	16	2	15.625	>512
20E.20	32	512	512	32	128	2	<1	<1	<0.25	3.9	>512
Kpg84	32	512	256	32	128	<1	<1	<1	<0.25	3.9	>512
fEc. 1	64	512	256	128	64	2	<1	<1	<0.25	3.9	>512
ECg85	32	256	256	128	64	2	<1	<1	<0.25	3.9	>512
fEcg99-1	16	64	64	128	8	4	<1	<1	<0.25	<1.95	>512
ECg29	32	512	128	64	8	4	<1	<1	<0.25	3.9	>512
ECg931	32	512	128	128	8	4	<1	<1	<0.25	3.9	>512
ECg932	16	64	256	64	8	16	1	<1	<0.25	<1.95	>512
ECg91	32	256	128	128	8	2	<1	<1	0.5	3.9	>512
ECg933	<1	256	8	4	<1	<1	<1	<1	<0.25	<1.95	512

Note: CAZ, Ceftazidime; FFC, Florfenicol; CHL, chloramphenicol; MXF, erythromycin; TET, tetracycline; CIP, ciprofloxacin; AMK, amikacin; MEM, meropenem; COL, colistin; TCG, tigecycline; RIF, rifampicin; FOS, fosfomicin.

Table S4 Plasmid replicons of the 10 *fosA7.5*-Positive *E. coli* and their transconjugants

Strains	Plasmid type	transconjugants	Plasmid type
Kpg84	FrepB, FIB, FII, I1, K	Kpg84-T	I1, FIB, FII
fEc.1	FrepB, FIB, FII, I1, K	Ecg87-T	I1, FIB, FII
ECg85	FrepB, FIB, I1, FII, K	Kpg85-T	I1, FIB, FII
fEcg99-1	FrepB, FIB, I1, Y, FII, K	None	None
ECg29	FrepB, FIB, I1, Y, FII, K	None	None
ECg931	FrepB, FIB, I1, Y, FII, K	None	None
ECg932	FrepB, FIB, I1, Y, FII, K	None	None
ECg91	FrepB, FIB, I1, Y, FII, K	None	None
ECg933	FrepB, FIB, I1, Y, FII, K	None	None
EC315	FrepB, FIB, FII, K	None	None

Table S5 Information for 28 *E. coli* isolates in GenBank database

Strain	Accession number	Host	Species	Create Date	Isolation Source
sheep48	LVQR01	Sheep	<i>E. coli</i>	2013	feces
GBGD55	RQUV01	Human	<i>E. coli</i>	2014	Gut
GBGD29	RQTV01	Human	<i>E. coli</i>	2015	Gut
ICBEc07	NIHJ01	Human	<i>E. coli</i>	2017	Rectal swab
VRES0670	UDII01	Chicken	<i>E. coli</i>	2015	meat
NA1001	MKWV01	Chicken	<i>E. coli</i>	2015	Large intestine
RCE08	LAXB01	Human	<i>E. coli</i>	2013	Gut
A3	NSAG01	Human	<i>E. coli</i>	2016	feces
1670	PIIZ01	Human	<i>E. coli</i>	2016	urine
6383	PIJR01	Human	<i>E. coli</i>	2014	urine
EC3	QXGO01	Chicken	<i>E. coli</i>	2014	retailed food
HB_Coli0	CP020933	Chicken	<i>E. coli</i>	2017	Gut
13KWH46	CP019250	Human	<i>E. coli</i>	2013	urine
fEC.1	CP085638	Pigeon	<i>E. coli</i>	2020	Organs
EC12	LIQA01	Cow	<i>E. coli</i>	2015	Unknown
402594	LGMW01	Human	<i>E. coli</i>	2007	feces
P0299917_1	AQER01	Human	<i>E. coli</i>	2011	feces
EC246	SBKI01	Unknown	<i>E. coli</i>	2019	Unknown
BX2S46	SRNQ01	Plant	<i>E. coli</i>	2019	retail fresh oregano
atEC	LRBX01	Mouse	<i>E. coli</i>	2014	feces

JML021	BFMS01	Human	<i>E. coli</i>	2015	Unknown
Eco04570	CACRYI01	Human	<i>E. coli</i>	2016	feces
BX1S32	SRND01	Plant	<i>E. coli</i>	2019	retail fresh mint
MOD1_EC6393	NLYN01	Pig	<i>E. coli</i>	2017	Lung
MOD1_EC5711	NLHB01	Cow	<i>E. coli</i>	2019	feces
105_L71_A	BIBS01	Cow	<i>E. coli</i>	2011	Unknown
KSNP025	BFYM01	Cow	<i>E. coli</i>	2013	Unknown
sheep8	LVPD01	Sheep	<i>E. coli</i>	2013	feces
sheep12	LVPH01	Sheep	<i>E. coli</i>	2013	feces

Table S6 Information for 27 *E. coli* isolates in GenBank database

Strain	Accession number	Host	Species	Create Date	Isolation Source
Ec_72279	VL0L01	Human	<i>E. coli</i>	2018	urine
Ec_45473	VL0R01	Human	<i>E. coli</i>	2017	urine
Ec_61031	VLPH01	Human	<i>E. coli</i>	2016	stool
Ec_44467	VLOU01	Human	<i>E. coli</i>	2017	urine
Ec_42060	VLPD01	Human	<i>E. coli</i>	2016	urine
Ec_75251	VLOJ01	Human	<i>E. coli</i>	2018	urine
Ec_75644	VLOI01	Human	<i>E. coli</i>	2018	urine
Ec_42720	VLPA01	Human	<i>E. coli</i>	2016	sputum
Ec_46922	VLON01	Human	<i>E. coli</i>	2017	urine
Ec_43709	VLOX01	Human	<i>E. coli</i>	2016	sputum
Ec_46174	VLOQ01	Human	<i>E. coli</i>	2017	urine
Ec_44714	VLOT01	Human	<i>E. coli</i>	2017	sputum
Ec40743	CP041919	Human	<i>E. coli</i>	2016	sputum
907357	AXUH01	Human	<i>E. coli</i>	/	/
A348	NSAT01	Human	<i>E. coli</i>	2016	feces
fECg99.1	CP085637	Pigeon	<i>E. coli</i>	2020	Organs
KK_NP010	BFWB01	Cow	<i>E. coli</i>	2014	/
MOD1_EC7014	NMMX01	Cow	<i>E. coli</i>	/	milk
ECC_1470	CP010344	Cow	<i>E. coli</i>	/	udder
MOD1_EC5146	NOGI01	Oreotragus	<i>E. coli</i>	2007	feces
MOD1_EC6518	NLVX01	Chicken	<i>E. coli</i>	/	blood
JHI_5034	OEDN01	/	<i>E. coli</i>	2008	barley trial
MOD1_EC6268	NMAH01	Cow	<i>E. coli</i>	2011	small intestine
IS9	CBWC01	Human	<i>E. coli</i>	2013	/
MOD1_EC896	NJJO01	Mouse	<i>E. coli</i>	2002	feces
MGH180	NGSF01	Human	<i>E. coli</i>	2015	/
NCCP_15647	AJMB01	Human	<i>E. coli</i>	2003	feces
GN02247	LQSP01	Human	<i>E. coli</i>	2003	blood

The primer sequence and fosfomycin resistance genes

Primer name	Sequence (5'-3')	product size (bp)	Tm (°C)
<i>fosA</i> -F	CTCAACCATCTGACCCTCGC	334	58
<i>fosA</i> -R	CGTGCAGCTCCAGCTTGT		
<i>fosA2</i> -F	GCTGCAATCACTCAACCATC	346	54
<i>fosA2</i> -R	CACGTGCAGCTCCAGCTT		
<i>fosA3</i> -F	GCGTCAAGCCTGGCATT	282	57
<i>fosA3</i> -R	GCCGTCAGGGTCGAGAAA		
<i>fosA4</i> -F	CTGGCGTTTTATCAGCGGT	230	55
<i>fosA4</i> -R	CTTCGCTGCGGTTGTCTTT		
<i>fosA5</i> -F	TATTAGCGAAGCCGATTTTGCT	187	55
<i>fosA5</i> -R	CCCCTTATACGGCTGCTCG		
<i>fosA6</i> -F	GCTACGGTTCAGCTTCCAGA	242	56
<i>fosA6</i> -R	CGAGCGTGGCGTTTTATCAG		
<i>fosC2</i> -F	TGGAGGCTACTTGGATTTG	217	50
<i>fosC2</i> -R	AGGCTACCGCTATGGATTT		
<i>fosA8</i> -F	ACGCCCTTAACCATCTGACCC	307	55
<i>fosA8</i> -R	AGAAAATAGAACGACGCCCTT		
<i>fosA10</i> -F	CGAGCGTGGCGTTTTATCAG	278	53
<i>fosA10</i> -R	GCCATCGGGATCGAGGAAAT		
<i>fosA7</i> -F	CTCTGAACCACTTAACGCT	270	53
<i>fosA7</i> -R	CTTCCAGACCGTCACTCC		
16S-27F	AGAGTTTGATCCTGGCTCAG	1500	58
16S-1492R	GGTTACCTTGTTACGACTT		

The primer sequence of oter resistance genes

Primer name	Sequence (5'-3')	product size (bp)	Tm (°C)
<i>CTX-M-1</i> -F	TTCCAGAATAAGGAATCCC	949	55
<i>CTX-M-1</i> -R	CGTCTAAGGCGATAAACAAA		
<i>CTX-M-9</i> -F	TGACCGTATTGGGAGTTTG	902	56
<i>CTX-M-9</i> -R	ACCAGTTACAGCCCTTCG		
<i>CTX-M-2</i> -F	CGACGCTACCCCTGCTATT	552	58
<i>CTX-M-2</i> -R	CCAGCGTCAGATTTTTCAGG		
<i>TEM</i> -F	AGGAAGAGTATGATTCAACA	550	58
<i>TEM</i> -R	CTCGTCGTTTGGTATGGC		
<i>CMY2</i> -F	AACAACCTGATTGCGTCTGA	1228	62
<i>CMY2</i> -R	TCCTGGGCCTCATCGTCAGTTAT		
<i>rmtB</i> -F	ACATCAACGATGCCCTCAC	725	55
<i>rmtB</i> -R	AAGTTCTGTTCCGATGGTC		
<i>floR</i> -F	CTGAGGGTGTGTCGTCATCTAC	673	59
<i>floR</i> -R	GTCCCGACAATGCTGACTAT		
<i>NDM</i> -F	GAATTCGCCCCATATTTTTGC	900	56
<i>NDM</i> -R	AACGCCTCTGTCACATCGAAAT		

The primers for MLST of *Escherichia coli*

Primer name	Sequence (5'-3')	product size (bp)	T _m (°C)
<i>adk</i> -F	CTCGCCATTAACCGTTTCAG	736	55
<i>adk</i> -R	CCAGATCAGCGCGAACTTCA		
<i>fumC</i> -F	TCACAGGTCGCCAGCGCTTC	769	62
<i>fumC</i> -R	TCCCGGCAGATAAGCTGTGG		
<i>gyrB</i> -F	ATCGGGCAGACCGGATGAC	816	63
<i>gyrB</i> -R	GTCCATGTAGGCGTTCAGG		
<i>icd</i> -F	CCGGCACAAGGCAAGAAGATC	857	66
<i>icd</i> -R	GGACGCAGCAGGATCTGTT		
<i>mdh</i> -F	GCCTTCAGGTTTCAGAACTCTCTCT	798	63
<i>mdh</i> -R	TTCTGTTCAAATGCGCTCAGG		
<i>purA</i> -F	CGCGCTGATGAAAGAGATGA	817	66
<i>purA</i> -R	CATACGGTAAGCCACGCAGA		
<i>recA</i> -F	CGCATTCGCTTTACCCTGACC	731	53
<i>recA</i> -R	GTCGAAATCTACGGACCGGAAT		

The primers for plasmid incompatibility group

Primer name	Sequence (5'-3')	product size (bp)
H11-F	GGAGCGATGGATTACTTCAGTAC	471
H11-R	TGCCGTTTCACCTCGTGAGTA	
H12-F	TTTCTCCTGAGTCACCTGTTAACAC	644
H12-R	GGCTCACTACCGTTGTCATCCT	
I1-F	CGAAAGCCGGACGGCAGAA	139
I1-R	TCGTTCGTTCCGCCAAGTTCGT	
X-F	AACCTTAGAGGCTATTTAAGTTGCTGAT	376
X-R	TGAGAGTCAATTTTTATCTCATGTTTTAGC	
L/M-F	GGATGAAAACATCAGCATCTGAAG	785
L/M-R	CTGCAGGGGCGATTCTTTAGG	
N-F	GTCTAACGAGCTTACCGAAG	559
N-R	GTTTCAACTCTGCCAAGTTC	
FIA-F	CCATGCTGGTTCTAGAGAAGGTG	462
FIA-R	GTATATCCTTACTGGCTTCCGCAG	
FIB-F	TCTGTTTATTCTTTTACTGTCCAC	702
FIB-R	CTCCCGTCGCTTCAGGGCATT	
W-F	CCTAAGAACAACAAGCCCCCG	242
W-R	GGTGCGCGGCATAGAACCGT	
Y-F	AATTCAAACAACACTGTGCAGCCTG	765
Y-R	GCGAGAATGGACGATTACAAAACCTT	
P-F	CTATGGCCCTGCAAACGCGCCAGAAA	534

P-R	TCACGCGCCAGGGCGCAGCC	
FIC-F	GTGAACTGGCAGATGAGGAAGG	262
FIC-R	TTCTCCTCGTCGCCAACTAGAT	
A/C-F	GAGAACCAAAGACAAAGACCTGGA	465
A/C-R	ACGACAAACCTGAATTGCCTCCTT	
T-F	TTGGCCTGTTTGTGCCTAAACCAT	750
T-R	CGTTGATTACACTTAGCTTTGGAC	
F _{repB} -F	TGATCGTTTAAGGAATTTTG	
F _{repB} -R	GAAGATCAGTCACACCATCC	
K/B-F	GCGGTCCGGAAGCCAGAAAAC	160
K-R	TCTTTCACGAGCCC GCCAAA	
B/O R	TCTGCGTTCCGCCAAGTTCGA	159
FII-F	CTGATCGTTTAAGGAATTTT	270
FII-R	CACACCATCCTGCACTTA	

Primers used for PCR-mapping analysis of genetic environment

Primer name	Sequence (5'-3')	product size (bp)	T _m (°C)
IS26-F	GCACGCATCACCTCAATACC	Variable	56.7
<i>fosA3</i> -R2	TCATCCAGCGACAAGCACA		
<i>fosA3</i> -F2	GGGGCTGAGGTATGGAAAGA	Variable	56.1
IS26-R	AGGAGATGCTGGCTGAACG		
<i>fosA</i> -up1-F	ATACAGCATCGTCAGCTCGG	833	58
<i>fosA</i> -up1-R	CGTGCAGCTCCAGCTTGT		
<i>fosA</i> -up2-F	TGAACGCCCGCAAGCCAACAT	1313	65
<i>fosA</i> -up2-R	CCGCGACAACATCCCCGAAGTG		
<i>fosA</i> -d1-F	CTGGAATACCGGGCCTATC	947	56
<i>fosA</i> -d1-R	TATCCTTGCTCTCCGGTCA		
<i>fosA</i> -d2-F	GCGTCATATCGACGACGTTT	1543	58
<i>fosA</i> -d2-R	GCAGCCAGGTCTGGGTTTAA		
<i>fosA</i> -d3-F	GCTTACATGGCAAAGGTCG	1500	58
<i>fosA</i> -d3-R	ATCGCCGGCAACAAACAAAT		
<i>fosA</i> -d4-F	TCACCTCGTCGATGATTGCC	1044	57.5
<i>fosA</i> -d4-R	GTTGTTGATACCGCTCACGC		
IS26U	GGATAATCAACGCCACGCTG	Variable	57
ISEcp1U1	AAAAATGATTGAAAGGTGGT	Variable	52
CTX-M-R	CGATATCGTTGGTGGTGCCATA		
CTX-M-F	TTTGGCATGTGCAGTACCAGTAA	Variable	56
<i>fosA3</i> -2R	CGGTTATCTTTCCATACCTCAG		
<i>fosA7</i> -UP1-F	TACATGCCCTTCAACTACACCGT	1994	69
<i>fosA7</i> -UP1-R	GCTAAATCTCCCACATGCAGCTC		
<i>fosA7</i> -UP2-F	CATGCACTACGTACGGTTTTT	729	63

<i>fosA7</i> -UP2-R	TATGTGCAGCCATTATCAGCAG		
<i>fosA7</i> -D1-F	CTCTGAACCACTTAACGCTTG	1700	62
<i>fosA7</i> -D1-R	ATCGCCATAGATCTTCACCAG		
<i>fosA7</i> -D2-F	GAACCGTAATATCCCGTGCTT	594	61
<i>fosA7</i> -D2-R	CCTCTGGCAACGAATCATCAA		
<i>fosA7</i> -D3-F	CCGACCTTGCATAATTCACC	1126	63
<i>fosA7</i> -D3-R	CAATACCATATGACGCCCGAT		
<i>fosA7</i> -D4-F	ACAATTGCGATCTTTTCCTGT	390	59
<i>fosA7</i> -D4-R	ATTACTGTGCTTTTCGTCACC		
