

1 **Supplemental Materials**

2

3 Table S1 Multi Locus Sequence Typing of the *mcr-1*-positive *Escherichia coli* isolates

Isolates	Alleles							ST
	<i>adk</i>	<i>fumC</i>	<i>gyrB</i>	<i>icd</i>	<i>mdh</i>	<i>purA</i>	<i>recA</i>	
C1	10	11	4	8	7	242	2	ST2462
C2	46	26	208	6	5	16	4	ST2732
C3	603	4	14	16	24	8	14	Unknown
C4	8	11	4	8	8	8	2	ST685
C5	64	11	5	8	8	8	2	ST202
C6	6	266	83	24	1	1	2	ST2847
P1	6	11	4	8	8	8	2	ST48
P2	64	7	1	8	8	8	6	ST871
P3	9	175	33	131	24	8	7	ST877
P4	10	11	4	8	8	8	2	ST10
P5	6	4	12	1	20	18	7	ST410
P6	10	11	4	1	8	8	2	ST34
P7	10	11	4	1	8	8	2	ST34

4

5

6

7

8

9

10

11

12

13

14

15

16

Table S2 Antibiotic Susceptibility Results of Strain P3

Antibiotic(s)	MIC(s) ($\mu\text{g/mL}$)	R/I/S ^a
Ampicillin	>512	R
Amoxicillin-Clavulanic acid	16/8	I
Ceftazidime	0.5	S
Ceftiofur	0.5	S
Colistin	32	R
Doxycycline	16	R
Enrofloxacin	0.25	S
Florfenicol	128	R
Gentamicin	4	S
Meropenem	≤ 0.03	S
Ofloxacin	1	S
Spectinomycin	16	S
Tetracycline	64	R
Trimethoprim-Sulfamethoxazole	0.12/2.4	S

17 ^a R, resistant; I, intermediate, S, susceptible.

18

19

20

Table S3 PacBio Sequencing Metrics of pMCR-1-P3

Matrix	Pre-Filter	Post-Filter
Polymerase Reads Bases	671,896,526	594,400,801
Polymerase Reads	150,292	50,843
Polymerase Read N50	15,843	16,170
Polymerase Read Length	4,470	11,690
Polymerase Read Quality	0.292	0.826

21

22

23

24

25

26

Table S4 Details of phage-related genes in plasmid pMCR-1-P3

Start	Stop	Annotation
3626	5332	phage protein
5393	6982	sheath structural protein
6992	7804	baseplate or tail tube
7957	8421	putative morphogenetic function
8433	8942	<i>bplB</i>
10563	10408	<i>mokW</i> protein
11886	11041	<i>repL</i> protein
12716	11916	<i>kilA</i>
13923	12880	<i>kilA</i> protein
15899	16465	<i>pmgC</i>
16476	17087	<i>tub</i>
17102	17983	<i>pmgB</i>
18065	21487	phage protein inside capsid D
21487	21843	<i>pep44b</i>
21840	23273	phage baseplate wedge tail fiber connector (T4-like <i>gp9</i>)
23273	24109	phage protein
24188	24622	gpR
24634	27273	phage tail fiber protein
27276	27809	phage tail fibers
28365	27838	phage tail fibers
29157	28369	phage tail fibers
34554	33853	phage tail fiber protein
35162	34602	phage DNA invertase
35290	35571	phage protein
35639	35968	phage protein
35965	36408	<i>lydB</i>
36395	36997	<i>hdf</i>
36999	38918	<i>darA</i>
38915	39280	<i>ddrA</i>
39317	42280	phage protein
42270	42578	<i>hxr</i>
44906	44112	phage protein
45766	46323	phage lysin, 1,4-beta-N-acetylmuramidase (EC 3.2.1.17) or lysozyme
46459	46635	putative antiholin
47634	46615	<i>pro</i>
49336	47627	phage portal protein
49413	56180	putative DNA methylase
56214	56654	<i>ulx</i>
56651	56899	modulator protein
59239	58598	<i>mat</i>
59989	59429	recombination enhancement function protein

60547	60236	establishment of lysogeny, putative
61629	60598	GST-loxP-cre recombinase fusion protein
62462	62671	C1 repressor inactivator
62782	63633	C1.100
65142	63658	phage terminase, large subunit
66335	65142	terminase A protein
66873	66421	late promoter-activating protein (<i>Gp10</i>)
68212	68033	<i>pdca</i>
68597	68217	death on curing protein, <i>doc</i> toxin
75831	75325	3'-phosphatase, 5'-polynucleotide kinase, phage-associated
77166	75904	<i>pmgS</i>
78169	77468	putative morphogenetic function
79466	78840	<i>pmgP</i>
80123	79968	putative morphogenetic function
80768	80190	phage protein
81016	80771	<i>pmgL</i>
81163	81540	phage protein
81550	82767	phage protein
82771	83499	phage protein
83486	84271	baseplate or tail stability
84273	85289	<i>gp6</i>
85282	85914	phage baseplate hub
86959	85961	phage protein
93487	91520	methyl-directed repair DNA adenine methylase (EC 2.1.1.72)
94440	93535	DNA recombination-dependent growth factor C
94717	94433	phage protein
94992	95171	phage protein
95180	95968	<i>upfB</i>
96008	96430	phage outer membrane lytic protein Rz
96465	96596	phage outer membrane lipoprotein Rz1
96608	97000	<i>upfA</i>

28

29

30

31

32