

Supplement Materials:

Table S1. The FICI of antibiotics combined with equisetin against *E. coli* B2.

Antibiotic	MIC of Antibiotic	FIC _A	MIC of Equisetin ¹	FIC _E	FICI
Colistin	8	0.125	1	0.0001	0.125
Rifampin	>128	0.5	16	0.5	1
Ofloxacin	32	0.5	8	0.5	1
Erythromycin	>128	0.5	16	0.5	1
Tilmicosin	16	0.5	4	0.5	1
Tetracyclines	>128	0.5	16	0.5	1
Kanamycin	>128	0.5	16	0.5	1
Norfloxacin	32	0.5	8	0.5	1
Florfenicol	>128	0.5	16	0.5	1
Gentamycin	32	0.5	8	0.5	1
Meropenem	4	0.5	4	0.5	1
Ceftriaxone	128	0.5	16	0.5	1
Ampicillin	>256	0.5	16	0.5	1
Tigecycline	0.25	0.5	4	0.5	1

¹In the presence of sub-MIC concentrations of antibiotics, the MIC of equisetin against *E. coli* B2.

Fractional inhibitory concentration (FIC) indices were calculated based on checkerboard broth microdilution assays. FIC index (FICI) is the sum of FIC_A and FIC_E. FIC_A is the FIC of tested antibiotic. FIC_E is the FIC of equisetin.

Table S2. Resistant isolates used in this study.

Strains	Description	Reference
<i>Escherichia coli</i> 10	<i>mcr-1</i>	This study
<i>E. coli</i> 29	<i>mcr-1</i>	This study
<i>E. coli</i> 206	<i>mcr-1</i>	This study
<i>E. coli</i> 213	<i>mcr-1</i>	This study
<i>E. coli</i> 250	<i>mcr-1</i>	This study
<i>E. coli</i> 258	<i>mcr-1</i>	This study
<i>E. coli</i> B2	<i>blaNDM-5 + mcr-1</i>	[1]
<i>E. coli</i> 267	<i>mcr-1</i>	This study
<i>E. coli</i> 294	<i>mcr-1</i>	This study
<i>E. coli</i> 296	<i>mcr-1</i>	This study
<i>E. coli</i> 299	<i>mcr-1</i>	This study
<i>E. coli</i> 162	<i>mcr-1</i>	This study
<i>E. coli</i> 315	<i>mcr-1</i>	This study
<i>E. coli</i> 378	<i>mcr-1</i>	This study
<i>E. coli</i> 393	<i>mcr-1</i>	This study
<i>E. coli</i> 638	<i>mcr-1</i>	This study
<i>E. coli</i> 878	<i>mcr-1</i>	This study
<i>E. coli</i> 1323	<i>mcr-1</i>	This study
<i>E. coli</i> 1334	<i>mcr-1</i>	This study
<i>E. coli</i> 1336	<i>mcr-1</i>	This study
<i>E. coli</i> 1794	<i>mcr-1</i>	This study
<i>E. coli</i> 12120478	<i>mcr-1</i>	This study
<i>E. coli</i> WZ3909	<i>mcr-1</i>	This study
<i>Klebsiella pneumoniae</i> 91	<i>mcr-1</i>	This study
<i>Enterobacter cloacae</i> 16-15	<i>mcr-1</i>	This study
<i>Raoultella planticola</i> 16-15	<i>mcr-1</i>	This study
<i>Providencia alcalifaciens</i> 16-1	<i>mcr-1</i>	This study
<i>Serratia marcescens</i> 16-99	<i>mcr-1</i>	This study

<i>Raoultella ornithinolytica</i> 16-68	<i>mcr-1</i>	This study
<i>Acinetobacter veronii</i> 172	<i>mcr-3</i>	[2]
<i>Acinetobacter baumannii</i> 2-38	<i>mcr-1</i>	This study
<i>Salmonella enterica</i> 8H-3	<i>mcr-1</i>	This study

Table S3. MRM parameters for the determination of equisetin by LC-MS/MS

Precursor ion (<i>m/z</i>)	Product ions (<i>m/z</i>)	Q1 pre bias (V)	Collision energy (eV)	Q3 pre bias (V)
374.30	175.20	-19.0	-18.0	-19.0
	170.10	-11.0	-24.0	-18.0

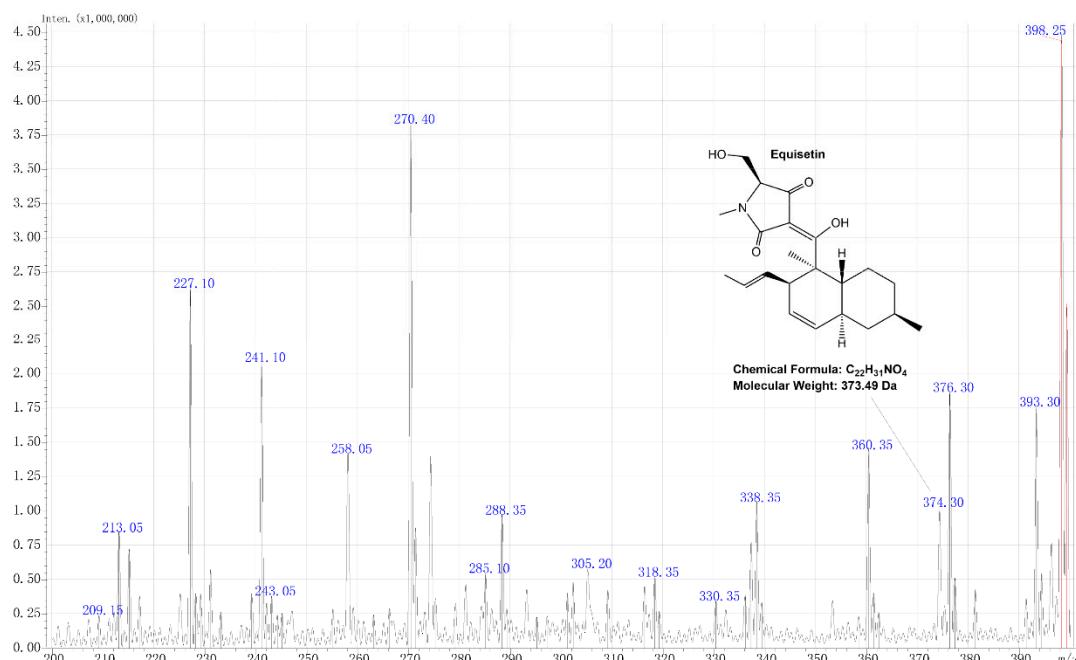


Figure S1. Precursor ion mass spectrum of equisetin standard solutions (1 µg/mL).

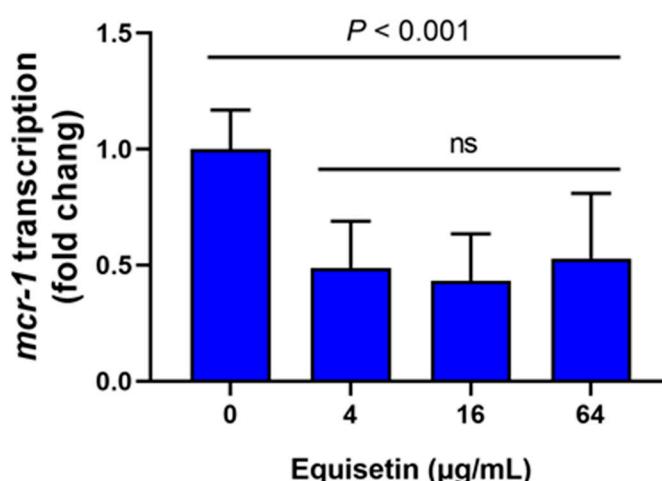


Figure S2. Equisetin inhibits transcription of *mcr-1* determined by reverse transcription (RT)-PCR. Data are representative of three independent experiments, and the mean of three biological

replicates is shown and error bars represent the s.d. *P* values were determined using an unpaired, two-tailed Student's t-test.

References

1. Song, M.; Liu, Y.; Huang, X.; Ding, S.; Wang, Y.; Shen, J.; Zhu, K. A broad-spectrum antibiotic adjuvant reverses multidrug-resistant Gram-negative pathogens. *Nat. Microbiol.* **2020**, doi:10.1038/s41564-020-0723-z.
2. Ling, Z.; Yin, W.; Li, H.; Zhang, Q.; Wang, X.; Wang, Z.; Ke, Y.; Wang, Y.; Shen, J. Chromosome-Mediated mcr-3 Variants in *Aeromonas veronii* from Chicken Meat. *Antimicrob. Agents. Ch.* **2017**, 61, doi:10.1128/aac.01272-17.