

Supplementary materials

Supplementary table S1. Antibiotics tested in this study

Strains	Antibiotic	Concentration (µg/mL)
<i>Enterobacteriaceae</i>	Amoxicillin-clavulanic acid	20+10
	Ceftazidime	30
	Cefotaxime	30
	Cefepim	30
	Cefoxitin	30
	Gentamycin	10
	Imipenem	10
	Ciprofloxacin	5
	Tetracycline	30
	Nalidixic acid	30
	Co-trimoxazole	25
	Ceftazidime	30
	Cefotaxime	30
	Cefepim	30
<i>Acinetobacter spp.</i>	Cefoxitin	30
	Gentamycin	10
	Imipenem	10
	Ciprofloxacin	5
	Tetracycline	30
	Co-trimoxazole	25

Supplementary table S2. Target genes and primers used in this study.

Target organism	Gene name	Gene function	Forward primer	Reverse primer	Product (bp)	Reference
<i>Klebsiella pneumoniae</i>	<i>mrkD</i>	Adhesin type 3 fimbriae	AAGCTATCGCTGTACTTCCG GCA	GGCGTTGGCGCTCAGATAGG	340	[139]
	<i>fimH-1</i>	Adhesin type1 fimbriae	ATGAACGCCTGGTCCTTTGC	GCTGAACGCCTATCCCCTGC	688	[140]
	<i>ycfM</i>	Outer membrane lipoprotein	ATCAGCAGTCGGGTCAGC	CTTCTCCAGCATTAGCG	160	[141]
	<i>ecpA</i>	<i>E. coli</i>	AATGGTTCACCGGGACATCA	AAGGATGAAATATCGCCGAC	759	[142]

		common pilus	TGTC	ATCC		
<i>E. coli</i>	<i>fimH</i>	Fimbrial adhesins	TGCAGAACGGATAAGCCGT G	GCAGTCACCTGCCCTCCGGTA	508	[143]
	<i>csgA</i>	Curli adhesin	ACTCTGACTTGACTATTACC	AGATGCAGTCTGGTCAAC	200	[144]
	<i>hlyF</i>	Putative hemolysin	TCGTTTAGGGTGCTTACCTTC AAC	TTTGGCGGTTTAGGCATTCC	444	[145]
<i>A. baumannii</i>	<i>csuE</i>	Adhesins	ATGCATGTTCTCTGGACTGA TGTTGAC	CGACTTGTACCGTGACCGTAT CTTGATAAG	976	[146]
	<i>ompA</i>	efflux system	CAATTGTTATCTCTGGAG	ACCTTGAGTAGACAAACGA	966	
	<i>bap</i>	biofilm-associated protein	TAG GGA GGG TAC CAA TGC AG	TCA TGA TTT GAT GCT GCA GCG ATA A	400	[147]

Supplementary table S3. PCR programs for virulence genes detection

Gene	Initial denaturation temperature (time)	Denaturation temperature (time)	Annealing temperature (time)	Extension temperature (time)	Number of cycles	Final extension temperature (time)	Final concentration (μM)
<i>*mrkD</i>	95°C (5min)	94°C (30s)	60°C (90s)	72°C (1min)	30	72°C (10min)	0.1
<i>*fimH-1</i>							
<i>ycfM</i>	95°C (4min)	95°C (45s)	55°C (1min)	72°C (1min)	30	72°C (5min)	0.4
<i>*ecpA</i>							
<i>fimH</i>	94°C (5 min)	94°C (60s)	55°C (60s)	72°C (2min)	35	72°C (10min)	
<i>csgA</i>	95°C (3 min)	94°C (1min)	48°C (1min)	72°C (1min)	30	72°C (5min)	0.4
<i>*hlyF</i>	94°C (3 min)	94°C (1 min)	51°C (60s)	72°C (1 min)	30	72°C (10 min)	
<i>csuE</i>	95°C for 10min	95°C for 30s	63°C for 30s	72°C for 1min	35	72°C for 10min	
<i>ompA</i>	95°C for 10min	95°C for 30s	52°C for 30s	72°C for 1min	35	72°C for 10min	

<i>bap</i>	95°C for 2min	95°C for 30s	61°C for 30s	68°C for 1min	30	68°C for 2min
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*Modifications have been made in the PCR program

Supplementary table S4. Concentrations of SAAP-148 and halicin tested in the checkerboard

Strain	24-hrs treatment			
	Final concentration SAAP-148 (μM)	Final concentration Halicin (μM)	Control SAAP-148(μM)	Control Halicin (μM)
<i>E. coli</i> EC2	3.2-25.6	3.2-12.8	3.2-102.4	3.2-51.2
<i>A. baumannii</i> AB1	3.2-25.6	12.8-51.2	3.2-102.4	12.8-204.8
<i>K. pneumoniae</i> KP1	3.2-25.6	12.8-102.4	3.2-102.4	12.8-204.8
<i>K. pneumoniae</i> KP2	3.2-25.6	12.8-102.4	3.2-102.4	12.8-204.8

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