

Supplementary Table 1.

Number	Gene Name	Resistance Gene Class	Gene Function
1	floR	Amphenicol	protection
2	catB3	Amphenicol	Protection
3	catB8	Amphenicol	Deactivate
4	ceoA	Amphenicol	Efflux
5	yidY	Amphenicol	Protection
6	cmx(A)	Amphenicol	Efflux
7	cmxA1	Amphenicol	Deactivate
8	rarD	Amphenicol	Efflux
9	cmlA5	Amphenicol	Protection
10	acc	Aminoglycoside	Efflux
11	shv34-marko	Aminoglycoside	Efflux
12	aadD	Aminoglycoside	Efflux
13	spcN	Aminoglycoside	Protection
14	speA	Aminoglycoside	Protection
15	aadA2	Aminoglycoside	Efflux
16	strA	Aminoglycoside	Deactivate
17	aph	Aminoglycoside	Protection
18	str	Aminoglycoside	Protection
19	aadA9	Aminoglycoside	Deactivate
20	aadE	Aminoglycoside	Efflux
21	aadA	Aminoglycoside	Efflux
22	cfiA	Beta lactum	Efflux
23	bla-L1	Beta lactam	Protection
24	ampC	Beta lactam	Protection
25	cphA	Beta lactam	Deactivate
26	blaCMY	Beta lactam	Efflux
27	blaOXA10	Beta lactam	Efflux
28	blaMOX	Beta lactam	Deactivate
29	blaPSE	Beta lactam	Protection
30	blaOCH	Beta lactam	Protection
31	blaOXY	Beta lactam	Efflux
32	blaPAO	Beta lactam	Protection
33	blaROB	Beta lactam	Efflux
34	blaSHV	Beta lactam	Deactivate
35	blaOKP	Beta lactam	Regulator
36	BlaVEB	Beta lactam	Efflux
37	BlaZ	Beta lactam	Efflux
38	blaCMY2	Beta lactam	Deactivate
39	blaTLA	Beta lactam	Deactivate
40	fox5	Beta lactam	Deactivate
41	blaSFO	Beta lactam	Protection
42	BlaOXA1	Beta lactam	Protection

43	blaGES	Beta lactam	Efflux
44	blaCTX-M	Beta lactam	Deactivate
45	BlaSHV	Beta lactam	Regulator
46	blaTEM	Beta lactam	Regulator
47	mexB	MDR	Efflux
48	mdtF	MDR	Efflux
49	acrR	MDR	Protection
50	Qac	MDR	Protection
51	emrB/qacA	MDR	Protection
52	marR	MDR	Efflux
53	tolC	MDR	Efflux
54	cfr	MDR	Deactivate
55	qac	MDR	Regulator
56	qacA/qacB	MDR	Deactivate
57	marR	MDR	Protection
58	acrA	MDR	Protection
59	lmrA	MDR	Efflux
60	mtrC	MDR	Efflux
61	mexF	MDR	Efflux
62	mepA	MDR	Protection
63	mexE	MDR	Efflux
64	ttgA	MDR	Deactivate
65	Pica	MDR	Deactivate
66	oprJ	MDR	Efflux
67	mtrD	MDR	Protection
68	oprD	MDR	Protection
69	mtrD	MDR	Efflux
70	mtrE	MDR	Efflux
71	sdeB	MDR	Protection
72	qacEΔ	MDR	Protection
73	qacH	MDR	Deactivate
74	qacEΔ1	MDR	Deactivate
75	tetA	Tetracycline	Efflux
76	tet(36)	Tetracycline	Regulator
77	tetU	Tetracycline	Protection
78	tetD	Tetracycline	Efflux
79	tetR	Tetracycline	Efflux
80	tetO	Tetracycline	Efflux
81	tetS	Tetracycline	Efflux
82	tetG	Tetracycline	Efflux
83	tetX	Tetracycline	Efflux
84	tetW	Tetracycline	Deactivate
85	tetL	Tetracycline	Deactivate
86	tetB	Tetracycline	Protection
87	tetM	Tetracycline	Efflux
88	tetH	Tetracycline	Efflux
89	tetK	Tetracycline	Efflux
90	tetC	Tetracycline	Efflux

91	tetQ	Tetracycline	Efflux
92	tetV	Tetracycline	Efflux
93	tetPB	Tetracycline	Deactivate
94	tetT	Tetracycline	Deactivate
95	tet(37)	Tetracycline	Protection
96	tet(35)	Tetracycline	Protection
97	tetPA	Tetracycline	Protection
98	sul1	Sulfonamide	Regulator
99	strB	Sulfonamide	Efflux
100	sulA/folP	Sulfonamide	Efflux
101	sulI	Sulfonamide	Efflux
102	sulIII	Sulfonamide	Efflux
103	ermK	MLSB	Efflux
104	ermJ	MLSB	Protection
105	ermF	MLSB	Protection
106	erm(35)	MLSB	Deactivate
107	lnuB	MLSB	Protection
108	ereA	MLSB	Efflux
109	VatE	MLSB	Efflux
110	vatD	MLSB	Efflux
111	ermT	MLSB	Efflux
112	msrC	MLSB	Efflux
113	matA	MLSB	Efflux
114	msrA	MLSB	Efflux
115	mphA	MLSB	Protection
116	mefA	MLSB	Protection
117	mphB	MLSB	Protection
118	vgb	MLSB	Protection
119	ISAb3-Acineto	Insertional Sequence	MGE
120	IS1111	Insertional Sequence	MGE
121	IS1133	Insertional Sequence	MGE
122	orf37-IS26	Insertional Sequence	MGE
123	ISEfm1-Enterob	Insertional Sequence	MGE
124	orf39-IS26	Insertional Sequence	MGE
125	ISAb3-Acineto	Insertional Sequence	MGE
126	ISPps1-pseud	Insertional Sequence	MGE
127	ISSm2-Xanthob	Insertional Sequence	MGE
128	pBS228-IncP-1 α	Plasmid Replication	MGE
129	PAMBL-1-F	Plasmid Replication	MGE
130	pAKD1-IncP-1 β	Plasmid Replication	MGE
131	pNI105map-F	Plasmid Replication	MGE
132	pNI105-F	Plasmid Replication	MGE
133	qnrA	Fluoroquinolone	Efflux
134	pikR2	Fluoroquinolone	Efflux
135	qacH	Fluoroquinolone	Deactivate
136	IncW_trwAB-1_f	plasmid incompatibility	MGE
137	IncN_rep-1_f	plasmid incompatibility	MGE
138	IncP_oriT-1_f	plasmid incompatibility	MGE

139	IncQ_oriT-1_f	plasmid incompatibility	MGE
140	vanA	Vancomycine	Protection
141	vanXB	Vancomycine	Efflux
142	vanB	Vancomycine	Deactivate
143	vanXD	Vancomycine	Deactivate
144	vanD	Vancomycine	Protection
145	vanXA	Vancomycine	Efflux
146	vanHD	Vancomycine	Efflux
147	vanWB	Vancomycine	Efflux
148	vanHB	Vancomycine	Efflux
149	vanSA	Vancomycine	Deactivate
150	vanYD	Vancomycine	Deactivate
151	vanC1	Vancomycine	Deactivate
152	vanTG	Vancomycine	Protection
153	vanG	Vancomycine	Protection
154	vanTE	Vancomycine	Efflux
155	inti1	Integrase	MGE
156	intI1F165_clinical	Integrase	MGE
157	int3	Integrase	MGE
158	int2	Integrase	MGE
159	int1-a	Integrase	MGE
160	tnpA	Transposes	MGE
161	tnpy	Transposes	MGE
162	tnpx	Transposes	MGE
163	tnpz	Transposes	MGE
164	trfa	Transposes	MGE