Supplementary Table S1 Comparison of plasmids sequences using BLASTN

(coverage+identity)	pKPN-c22	pKPSH11	p6234-198.371kb	pKPN3-307_TypeC	pKPN3-307_typeA	pA1705-qnrS	p911021-tetA	p1642-tetA
pKPN-c22		(99%+99%)	(99%+100%)	(82%+99%)	(81%+99%)	(70%+99%)	(70%+97%)	(70%+99%)
pKPSH11	(92%+99%)		(99%+99%)	(77%+99%)	(82%+99%)	(71%+96%)	(68%+96%)	(68%+96%)
p6234-198.371kb	(92%+100%)	(99%+99%)		(77%+99%)	(82%+98%)	(72%+99%)	(67%+99%)	(67%+99%)
pKPN3-307_TypeC	(68%+99%)	(69%+99%)	(69%+99%)		(97%+99%)	(79%+99%)	(70%+99%)	(70%+98%)
pKPN3-307_typeA	(64%+99%)	(70%+99%)	(71%+99%)	(93%+99%)		(80%+97%)	(68%+97%)	(68%+97%)
pA1705-qnrS	(47%+99%)	(52%+96%)	(53%+99%)	(65%+99%)	(68%+97%)		(88%+99%)	(87%+99%)
p911021-tetA	(51%+99%)	(54%+96%)	(55%+99%)	(63%+99%)	(64%+97%)	(97%+99%)		(99%+99%)
p1642-tetA	(51%+99%)	(55%+96%)	(55%+99%)	(63%+98%)	(64%+97%)	(97%+99%)	(99%+99%)	

Supplementary table S2 Pairwise comparison of plasmids backbone sequences using BLASTN

(coverage+identity)	pKPN-c22	pKPSH11	p6234-198.371kb	pKPN3-307_TypeC	pKPN3-307_typeA	pA1705-qnrS	p911021-tetA	p1642-tetA
pKPN-c22		(99%+99%)	(99%+99%)	(80%+99%)	(81%+99%)	(78%+97%)	(78%+97%)	(78%+97%)
pKPSH11	(98%+99%)		(98%+99%)	(79%+99%)	(80%+98%)	(77%+97%)	(77%+97%)	(77%+96%)
p6234-198.371kb	(99%+99%)	(99%+99%)		(80%+99%)	(81%+98%)	(78%+97%)	(78%+97%)	(78%+96%)
pKPN3-307_TypeC	(98%+99%)	(98%+99%)	(98%+99%)		(98%+99%)	(94%+99%)	(94%+99%)	(94%+99%)
pKPN3-307_typeA	(98%+99%)	(98%+98%)	(98%+98%)	(97%+99%)		(95%+98%)	(95%+98%)	(95%+97%)
pA1705-qnrS	(96%+97%)	(96%+97%)	(96%+97%)	(95%+99%)	(97%+98%)		(100%+99%)	(100%+99%)
p911021-tetA	(96%+97%)	(96%+97%)	(96%+97%)	(95%+99%)	(97%+98%)	(100%+99%)		(100%+99%)
p1642-tetA	(96%+97%)	(96%+96%)	(96%+96%)	(95%+99%)	(97%+97%)	(100%+99%)	(100%+99%)	

Supplementary Table S3 Accessory modules of the MDR region from pKPN-c22, pKPSH11, p6234-198.371kb, pKPN3-307_TypeC, and pKPN13-307_typeA and the MDR-1 region from pA1705-qnrS

pKPN-c22 MDR region	**pKPSH11 MDR region**	**p6234-198.371kb MDR region**	**pKPN3-307_TypeC MDR region**	**pKPN3-307_typeA MDR region**	**pA1705-qnrS First MDR region**
IS*26*	ΔIS*26*–ΔIS*26*	IS*Kpn28*	Tn*3* Family transposon remnant	Tn*3* Family transposon remnant	Truncated IS*26*–*sul2*–*strA*–*strB*–IS*26* Transposition unit
In37 residual	ΔIS*5075*	IS*26*	IS*26*	IS*26*	Tn*2*
IS*26*	IS*26*–*sul2*–*strA* *strB*–IS*26* Transposition unit residual	ΔIS*Pa38*	In37 residual	ΔIS*Pa38*	IS*26*–*sul2*–*strA*–*strB*–IS*26* Transposition unit residual
Tn*1721* residual	Tn*2*-3'	IS*5075*	ΔIS*26*	IS*5075*	IS*5075*
Tn*5403*	IS*Ecp1*–*bla*$_{CTX-M-15}$–Δ*orf477* Transposition unit	IS*26*–*sul2*–*strA*–*strB*–IS*26* Transposition unit residual	Tn*1721 residual*	IS*26*–*sul2*–*strA*–*strB*–IS*26* Transposon remnant	ΔIS*26*
Truncated IS*3000*–*qnrB1*–IS*26* Transposition unit	Tn*2*-5'	Tn*2*-3'	ΔTn*5403*	ΔTn*2*	IS*26*–*tetA*(D)–*tetR*(D)–IS*26* Transposition unit derivative
In191	IS*26* residual	IS*Ecp1*–*bla*$_{CTX-M-15}$–Δ*orf477* Transposition unit	Truncated IS*3000*–*qnrB1*–IS*26* Transposition unit	IS*Ecp1*–*bla*$_{CTX-M-15}$–Δ*orf477* Transposition unit	IS*26*
ecoRII–*ecoRIImet*	IS*26*–*cld*–IS*26* Transposition unit residual	Tn*2*-5'	In191	Tn*2* residual	*orf447*
IS*1X2* residual	·Tn*6415* residual	ΔIS*26*	*ecoRII*–*ecoRIImet*	Tn*6415*	ΔIS*Kpn38*

ΔIS*26*	ΔIS*26*	Truncated IS*26*–*cld*–IS*26* Transposition unit	IS*1X2* residual	In37 residual	-
ΔTn*2*	In37 residual	ΔTn*2*	IS*26*	IS*26*	-
Truncated IS*26*–*cld*–IS*26* Transposition unit	ΔIS*26*	ΔTn*6415*	-	Tn*1721* residual	-
ΔIS*26*–IS*26*	Tn*1721* residual	In37 residual	-	Tn*5403*	-
-	Tn*5403*	IS*26*	-	Truncated IS*3000*–*qnrB1*–IS*26* Transposition unit	-
-	IS*3000*–*qnrB1*–IS*26* Transposition unit residual	Tn*1721* residual	-	In191	-
-	ΔIS*26*	Tn*5403*-3'	-	*ecoRII*–*ecoRIImet*	-
-	In191	IS*26*	-	IS*1X2* residual	-
-	*ecoRII*–*ecoRIImet*	Tn*5403*-5'	-	IS*26*	-
-	IS*1X2* residual	Truncated IS*3000*–*qnrB1*–IS*26* Transposition unit	-	-	-
-	ΔIS*26*–ΔIS*26*–ΔIS*26*	In191	-	-	-
-		*ecoRII*–*ecoRIImet*	-	-	-
-	-	IS*26*	-	-	-

Supplementary Table S4 Accessory modules of the MDR region from p1642-tetA and p911021-tetA, and the MDR-2 region from pA1705-qnrS

p1642-tetA	p911021-tetA	pA1705-qnrS
ΔTn*1721*	IS*Ecp1*–*bla*$_{CTX-M-14}$–IS*903D*	ΔTn*1721*
In363	*orf273*	In363
IS*26*-*mph*(A)–*mrx*–*mphR*(A)–IS*6100*	*orf219*	IS*26*–*mph*(A)–*mrx*–*mphR*(A)–IS*6100*
IS*26*–*bla*$_{SHV-12}$–IS*26*	IS*26*	*orf267*
Tn*1721*	*orf762*	*orf537*
orf627	IS*26*–*bla*$_{SHV-12}$–IS*26*	IS*26*
IS*26*–*bla*$_{LAP-2}$–*qnrS*–IS*26*	IS*26*	Tn*1721*
aacC2–*tmrB*	ΔIS*Vsa5*	*orf627*
ΔIS*Vsa5*	*aacC2*–*tmrB*	IS*26*–*bla*$_{LAP-2}$–*qnrS*–IS*26*
IS*26*	IS*26*–*bla*$_{LAP-2}$–*qnrS*–IS*26*	*aacC2*–*tmrB*
IS*26*–*bla*$_{SHV-12}$–IS*26*	*orf627*	ΔIS*Vsa5*
orf219	Tn*1721*	IS*26*
orf273	Tn*4352*	IS*26*–*bla*$_{SHV-12}$–IS*26*
IS*Ecp1*–*bla*$_{CTX-M-14}$–IS*903D*	IS*26*-*mph*(A)–*mrx*–*mphR*(A)–IS*6100*	*orf762*
-	In363	IS*26*
-	ΔTn*1721*	*orf219*
-	-	*orf273*
-	-	IS*Ecp1*–*bla*$_{CTX-M-14}$–IS*903D*