

## Plasmids page:

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Plasmid	Description	Resistance	Replicative status and copy number in <i>Streptomyces</i>	Comments / (Reference)]
<b>Expression vectors</b>				
pIJ86	Expression vector ( <i>ermE*</i> p)	AprR (ES)	Conjugative, multi-copy	pIJ101 origin, constitutive expression vector (1)
pIJ6021	Expression vector ( <i>tipAp</i> )	KanR (S), TsrR (S)	Non-conjugative, multi-copy	Tsr-inducible ( <i>tipAp</i> ) expression vector (2)
pIJ6902	Expression vector ( <i>tipAp</i> )	AprR (ES), TsrR (S)	Conjugative, integrative (phiC31)	Tsr-inducible ( <i>tipAp</i> ) expression vector (3)
pIJ8671	Expression vector ( <i>tipAp</i> )	AprR (ES), TsrR (S)	Conjugative, requires insert for homologous integration	Allows Tsr-inducible expression of chromosomal genes after homologous recombination
pIJ10257	Expression vector ( <i>ermE*</i> p)	HygR (ES)	Conjugative, integrative (phiBT1)	Constitutive ( <i>ermE*</i> p) expression vector (4)
pIJ10727	Expression vector (aphp)	AprR (ES)	Conjugative, multi-copy	pIJ101 origin, derived from pIJ86, constitutive (aphp) expression vector

pIJ12477	Expression vector ( <i>ermE</i> *p)	AprR (ES), KanR (ES)	Conjugative, multi-copy	pIJ101 origin, derived from pIJ86 by addition of neo from SuperCos1, constitutive ( <i>ermE</i> *p) expression vector (5)
pIJ12551	Expression vector ( <i>ermE</i> *p)	AprR (ES)	Conjugative, integrative (phiC31)	Constitutive ( <i>ermE</i> *p) expression vector (6)
pIJ12552	Expression vector ( <i>ermE</i> *p)	AprR (ES)	Conjugative, integrative (phiC31)	<i>ermE</i> *p in opposite orientation to pIJ12551, constitutive expression vector
pIJ12901	Expression vector ( <i>tipAp</i> )	KanR (ES), TsrR (S)	Conjugative, multi-copy, unstable	pSG5 origin, temperature-sensitive, Tsr-inducible ( <i>tipAp</i> ) expression vector
pIJ13042	Expression vector ( <i>ermE</i> *p)	AprR (ES), TsrR (S)	Conjugative, multi-copy	pIJ101 origin, derived from pIJ86 by addition of tsr, constitutive ( <i>ermE</i> *p) expression vector
pIJ12739	Expression vector ( <i>tipAp</i> )	AprR (ES), TsrR (S)	Conjugative, multi-copy, unstable	pSG5 origin, temperature-sensitive, Tsr-inducible ( <i>tipAp</i> ) Meganuclease gene (7)
pIJ12742	Expression vector ( <i>ermE</i> *p)	AprR (ES), TsrR (S)	Conjugative, multi-copy, unstable	pSG5 origin, temperature-sensitive, <i>ermE</i> *p constitutive Meganuclease gene (7)
<b>Mutational plasmids</b>				
pIJ12738	Insertional vector with Scel site	AprR (ES)	Conjugative, requires insert for homologous integration	Vector for integration by homologous recombination before Meganuclease cleavage (7)
pIJ12739	Meganuclease delivery plasmid	AprR (ES), TsrR (S)	Conjugative, multi-copy, unstable	pSG5 origin, temperature-sensitive, Tsr-inducible ( <i>tipAp</i> ) Meganuclease gene
pIJ12742	Meganuclease delivery plasmid	AprR (ES), TsrR (S)	Conjugative, multi-copy, unstable	pSG5 origin, temperature-sensitive, <i>ermE</i> *p constitutive Meganuclease gene (7)
pIJ12900	Deletion/replacement vector	KanR (ES), TsrR (S)	Non-conjugative, multi-copy, unstable	pSG5 origin, temperature-sensitive, useful for deletion after introduction of homologous flanking regions and AprR/oriT

pIJ12901	Deletion/replacement vector	KanR (ES), TsrR (S)	Conjugative, multi-copy, unstable	pIJ12900 with oriT, useful for generation of unmarked deletions
<b>Reporter vectors</b>				
pIJ486/7	KanR reporter plasmid	TsrR (S)	Non-conjugative, multi-copy	Kan reporter plasmids (8)
pIJ8630	EGFP reporter plasmid	AprR (ES)	Conjugative, integrative (phiC31)	Cloning sites: BglIII, KpnI, XbaI, NdeI (9)
pIJ8660	EGFP reporter plasmid	AprR (ES)	Conjugative, integrative (phiC31)	Cloning sites: BglIII, EcoRV, BamHI, XbaI, NsiI, KpnI, NdeI (9)
pIJ10500	Triple flag-tag plasmid	HygR (ES)	Conjugative, integrative (phiBT1)	Flag (3x) cassette in EcoRV site of pMS82 (10)
pIJ10740	Positive control for pGUS assays	AprR (ES)	Conjugative, integrative (phiC31)	pGUS with <i>ermE</i> *p (M. Feeney, unpublished)
pIJ10741	Positive control for pIJ10742 assays	HygR (ES), SpcR (E)	Conjugative, integrative (phiBT1)	pIJ10742 with <i>ermE</i> *p (11)
pIJ10742	Beta-glucuronidase reporter plasmid	HygR (ES), SpcR (E)	Conjugative, integrative (phiBT1)	pMS82 with <i>gusA</i> (beta-glucuronidase assays) (11)
pSS150	<i>ermE</i> *p-sfGFP reporter plasmid	HygR (ES)	Conjugative, integrative (phiBT1)	pIJ10257-based plasmid for the constitutive expression of cytoplasmic sfGFP (12)
pIJ10772 (pSS172)	Cloning vector with MCS and mCherry gene	HygR (ES)	Conjugative, integrative (phiBT1)	pIJ10770-based (13)
pIJ10773 (pSS173)	Cloning vector with MCS and YPet gene	HygR (ES)	Conjugative, integrative (phiBT1)	pIJ10770-based (12)
<b>Cloning vectors</b>				
pIJ10706	Cloning vector with MCS	HygR (ES)	Conjugative, integrative (phiC31)	pSET152 derivative with AprR replaced with HygR (14)
pIJ10750 (pSS10)	Cloning vector with MCS	HygR (ES)	Conjugative, integrative (phiBT1)	pMS82 derivative with additional cloning sites (AprR gene promoter reads into MCS)

				(S.Schlimpert, unpublished)
pIJ10770 (pSS170)	Cloning vector with MCS	HygR (ES)	Conjugative, integrative (phiBT1)	pIJ10750 derivative with AprR gene promoter removed (13)
pIJ12330	Cloning vector with MCS	HygR (ES), AprR (ES)	Conjugative, integrative (phiC31)	pIJ10706 derivative with additional resistance marker - useful for establishing conjugation/selection conditions
pIJ12331	Cloning vector with MCS	HygR (ES), SpcR/StrR (S)	Conjugative, integrative (phiC31)	pIJ10706 derivative with additional resistance marker - useful for establishing conjugation/selection conditions
pIJ12332	Cloning vector with MCS	HygR (ES), VioR (S)	Conjugative, integrative (phiC31)	pIJ10706 derivative with additional resistance marker - useful for establishing conjugation/selection conditions
pIJ12333	Cloning vector with MCS	HygR (ES), TsrR (S)	Conjugative, integrative (phiC31)	pIJ10706 derivative with additional resistance marker - useful for establishing conjugation/selection conditions (6)
<b>Cosmid vectors</b>				
pIJ10702	Conjugative, integrative cosmid vector	AprR (ES), Amp (E)	Conjugative, integrative (phiC31)	Derived from SuperCos1 (15)
<b>PCR targeting</b>				
pIJ773	PCR-targeting - AprR, oriT cassette	AprR (ES), AmpR (E)	Non-conjugative, multi-copy in <i>E. coli</i>	With FRT sites (16)
pIJ773_del_oriT	PCR-targeting - AprR cassette	AprR (ES), AmpR (E)	Non-conjugative, multi-copy in <i>E. coli</i>	With FRT sites
pIJ778	PCR-targeting - SpcR/StrR, oriT cassette	SpcR/StrR (S), AmpR/SpcR (E)	Non-conjugative, multi-copy in <i>E. coli</i>	With FRT sites (17)

pIJ799	PCR-targeting - AprR, oriT cassette	AprR (ES), AmpR (E)	Non-conjugative, multi-copy in <i>E. coli</i>	No FRT sites, flanked by bla sequences (to replace bla by AprR-oriT to construct conjugative SuperCos (including flipped) derivatives (18)
pIJ10700	PCR-targeting - HygR, oriT cassette	HygR (ES), AmpR (E)	Non-conjugative, multi-copy in <i>E. coli</i>	With FRT sites (16)
pIJ10701	PCR-targeting - HygR, oriT cassette	HygR (ES), AmpR (E)	Non-conjugative, multi-copy in <i>E. coli</i>	No FRT sites, flanked by bla sequences (to replace bla by HygR-oriT to construct conjugative SuperCos (including flipped) derivatives (16)
<b>Other material</b>				
pSET152	Cloning vector	AprR (ES)	Conjugative, integrative (phiC31)	(19)
pKC1132	Suicide vector with oriT	AprR (ES)	Conjugative, non-integrative	Blue/white screening in <i>E. coli</i> for insertion of deletion/disruption cassette (20)
<b>Abbreviations</b>				
<b>Antibiotics:</b>			<b>Strains:</b>	
Amp, ampicillin	Hyg, hygromycin	Str, streptomycin	E = <i>E. coli</i>	
Apr, apramycin	Kan, kanamycin	Tsr, thiostrepton	S = <i>Streptomyces</i>	
Cml, chloramphenicol	Spc, spectinomycin	Vio, viomycin		

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