

Reference strains for PCR detection

Species	Name	Genes	Restrictions	Relevant resistance	Use
<i>E. faecalis</i>	JH2-2 cat pip 501	Cat pip501		Chloramphenicol	PCR pos. control (cat501)
<i>S. Weltevreden</i>	TA 428/97	catA1		Chloramphenicol	PCR post control (catA1)
<i>S. Typhimurium</i>	DS611	cmlA		Chloramphenicol	PCR post control (cmlA)
<i>E. coli</i>	TOP10 with plasmid pAT851 (pCR2.1 + qepA)	qepA	Strain is not available for distribution from DTU Food	Ciprofloxacin, low level	PCR pos. Control (qepA)
<i>E. cloacae</i>	03-577	qnrA1		Ciprofloxacin, low level	PCR pos. Control (qnrA)
<i>K. pneumoniae</i>	Kp15	qnrB1		Ciprofloxacin, low level	PCR pos. Control (qnrB)
<i>K. pneumoniae</i>	qnrB2	qnrB2		Ciprofloxacin, low level	PCR pos. Control (qnrB)
<i>K. pneumoniae</i>	qnrB4	qnrB4		Ciprofloxacin, low level	PCR pos. Control (qnrB)
<i>K. pneumoniae</i>	qnrB5	qnrB5		Ciprofloxacin, low level	PCR pos. Control (qnrB)
<i>S. Bovismorbificans</i>	AM12888	qnrS1		Ciprofloxacin, low level	PCR pos. Control (qnrS)
<i>E. coli</i>	KAM3 tf	qnrS2		Ciprofloxacin, low level	PCR pos. Control (qnrS)
<i>E. coli</i>	all <i>E. coli</i>	CopA		Copper	PCR pos. control (copA)
<i>E. coli</i>	pRJ1004	PcoD		Copper	PCR pos. control (pcoD)
<i>E. faecium</i>	A17-SV1 Atepaste Ent.	tcrB		Copper	PCR pos. control (tcrB)
<i>E. coli</i>	O 149 77-30108-11	CTX-M1		ESBL	PCR pos. control (CTX-M1) Works for CTX-Mall
<i>E. coli</i>	H0 5144 0381	CTX-M14	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (CTX-M14) Works for CTX-Mall
<i>E. coli</i>	H0 6030 0423	CTX-M15	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (CTX-M15) Works for CTX-Mall
<i>S. Virchow</i>	58.67 Holland TEM-1b, CTX-M2, SHV	CTX-M2	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (CTX-M2) Works for CTX-Mall
<i>S. Isangi</i>	55.11 Holland	CTX-M28	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (CTX-M28) Works for CTX-Mall
<i>S. Typhimurium</i>	59.45 Holland	CTX-M3	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (CTX-M3) Works for CTX-Mall
<i>S. Agona</i>	CTX-M8 (Gisele)	CTX-M8		ESBL	PCR pos. control (CTX-M8) Works for CTX-Mall
<i>S. Virchow</i>	75-22438-1 Vagtel	CTX-M9	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (CTX-M9) Works for CTX-Mall
<i>E. coli</i>	C600(pUZ8-LCR-1)	LCR-1	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (LCR-1)
<i>E. coli</i>	J53/RGN238	OXA-1	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (OXA-1)
<i>E. coli</i>	J53/R46	OXA-2	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (OXA-2)
<i>E. coli</i>	oxa 30	OXA-30	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (OXA-30)
<i>E. coli</i>	C600/pMG54	OXA-5	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (OXA-5)
<i>E. coli</i>	C600/pMG202	OXA-7	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (OXA-7)
<i>E. coli</i>	HB101/pJHCT00181	OXA-9	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (OXA-9)
<i>P. aeruginosa</i>	pyo pero	PER-1	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (PER-1)
<i>S. Keurmassar</i>	DAK 2	SHV-12	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (SHV-12)
<i>S. Bredeney</i>	TEM-104 (Gisele)	TEM-104		ESBL	PCR pos. control (TEM-104) Works for TEM-all
<i>E. coli</i>	74-13245-1 Ingers IOL	TEM-127	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-127) Works for TEM-all
<i>E. coli</i>	74-14037-1 Ingers IOL	TEM-128	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-128) Works for TEM-all
<i>E. coli</i>	31 Holland	TEM-1A	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-1A) Works for TEM-all
<i>E. coli</i>	30 Holland	TEM-1B	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-1B) Works for TEM-all
<i>E. coli</i>	32 Holland	TEM-1C	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-1C) Works for TEM-all
<i>E. coli</i>	24 Holland	TEM-1F	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-1F) Works for TEM-all
<i>Salmonella Paratyphi B</i>	TEM -20	TEM-20	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-20) Works for TEM-all
<i>E. coli</i>	10 Holland TEM-30, AmpC+	TEM-30	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-30) Works for TEM-all
<i>E. coli</i>	2 Holland	TEM-37	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-37) Works for TEM-all
<i>E. coli</i>	76-33094-7 Gullash	TEM-52b		ESBL	PCR pos. control (TEM-52b) Works for TEM-all
<i>S. Isangi</i>	61.12 Holland	TEM-63	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (TEM-63) Works for TEM-all
<i>E. coli</i>	L. T.	VEB-1	Strain is not available for distribution from DTU Food	ESBL	PCR pos. control (VEB-1)
<i>S. Bereilly</i>	50.32	ACC-1		ESBL (ampC)	PCR pos. control (ACC-1)
<i>E. coli</i>	J53/pMG251	ACT-1	Strain is not available for distribution from DTU Food	ESBL (ampC)	PCR pos. control (ACT-1)
<i>E. coli</i>	ampC+ 16 Holland	ampC +		ESBL (ampC)	PCR pos. control (ampC+)
<i>E. coli</i>	Transkonj. from <i>K. pneumoniae</i> with CMY-1	CMY-1	Strain is not available for distribution from DTU Food	ESBL (ampC)	PCR pos. control (CMY-1)
<i>E. coli</i>	YMC 96/8/986	CMY-10	Strain is not available for distribution from DTU Food	ESBL (ampC)	PCR pos. control (CMY-10)
<i>S. Heidelberg</i>	CMY-18 (Gisele)	CMY-18		ESBL (ampC)	PCR pos. control (CMY-18)
<i>S. Heidelberg</i>	75-12893-1	CMY-2		ESBL (ampC)	PCR pos. control (CMY-2)
<i>E. coli</i>	J53/pMG247	DHA-1	Strain is not available for distribution from DTU Food	ESBL (ampC)	PCR pos. control (DHA-1)
<i>E. coli</i>	TG1/pUC18	FOX-1	Strain is not available for distribution from DTU Food	ESBL (ampC)	PCR pos. control (FOX-1)
<i>S. Typhimurium</i>	P502212 DT104	PSE-1	Strain is not available for distribution from DTU Food	ESBL (Beta lactamase)	PCR pos. Control (PSE-1)
<i>K. pneumoniae</i>	Kp ORI	GES-1	Strain is not available for distribution from DTU Food	ESBL (Metallo)	PCR pos. control (GES-1)
?	101/1477	IMP-1	Strain is not available for distribution from DTU Food	ESBL (Metallo)	PCR pos. control (IMP-1)
?	4824	VIM-2	Strain is not available for distribution from DTU Food	ESBL (Metallo)	PCR pos. control (VIM-2)
<i>E. faecium</i>	14b	emtA		Evernimicin, Avilamycin	PCR pos. control (emtA)
<i>S. Typhimurium</i>	DS611	?		Florphenicol	PCR pos. control (Florphenicol)
<i>S. Typhimurium</i>	P502212 DT104	floR		Florphenicol	PCR pos. control (Florphenicol)
<i>Pseudomonas</i>	pPF2 floR	pPF2		Florphenicol	PCR pos. control (pPF2)
<i>E. faecium</i>	SF 11770 1b (chow)	APH(2 ^{''})-1b		Gentamicin	PCR pos. control (APH (2 ^{''})-1b)
<i>E. gallinarum</i>	SF 117 1c (chow)	APH(2 ^{''})-1c		Gentamicin	PCR pos. control (APH (2 ^{''})-1c)
<i>E. casseliflavus</i>	UC 73 1d (chow)	APH(2 ^{''})-1d		Gentamicin	PCR pos. control (APH (2 ^{''})-1d)
<i>S. infantis</i>	14 (Gisele)	AAC(6 ^{''})-1b		Gentamicin	PCR pos. control (AAC (6 ^{''})-1b)

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Klebsiella	23823 AAC (3 ⁺)-II	AAC(3 ⁺)-II		Gentamicin and Tobramycin,	PCR pos. control (AAC(3 ⁺)-II)
Klebsiella	K8 AAC (3) - II	AAC(3 ⁺)-II		Gentamicin and Tobramycin,	PCR pos. control (AAC(3 ⁺)-II)
E.faecalis	SF 350 Ia	AAC(6)-Ie and APH(2 ⁺)-Ia		Gentamicin and Tobramycin,	PCR pos. control (AAC (6 ⁺)-Ie)
E.coli	K13 AAC (3)- IV	AAC(3 ⁺)-IV		Gentamicin, Apramycin and Tobramycin,	PCR pos. control (AAC(3 ⁺)-IV)
E.coli	SR225	AAC(3 ⁺)-IV		Gentamicin, Apramycin and Tobramycin,	PCR pos. control (AAC(3 ⁺)-IV)
Enterococci	JH2-1-5 APH (3 ⁺ III)	APH (3 ⁺)-III		Gentamicin, Kanamycin and Neomycin	PCR pos. control (APH 3 ⁺ III)
E.coli	K2 ANT (2 ⁺)-I	ANT (2 ⁺)-I		Gentamicin, Kanamycin and Tobramycin,	PCR pos. control (ANT(2 ⁺)-I)
E.coli	K2 ANT (2 ⁺)-I	APH(3 ⁺)-II		Gentamicin, Kanamycin and Tobramycin,	PCR pos. control (APH(3 ⁺)-II)
Salmonella Rissen	7522486-1	APH(3 ⁺)-I		Kanamycin, Neomycin	PCR pos. Control (APH(3 ⁺)-I)
E.faecium	Unknown	Linezolid		Linezolid	PCR pos. control (Linezolid)
S.aureus	S.aureus 1206::Tn554 ermA	ermA		Macrolide	PCR pos. control (ermA)
E.faecalis	JH2-2::Tn1545	ermB		Macrolide	PCR pos. control (ermB)
E.coli	JIR2220 E. Coli DH5a/pJIR599 ermBP	ermBP		Macrolide	PCR pos. control (ermBP)
Bacillus subtilis	Bacillus subtilisB.3HU104/pE194 Patrice Courvalin ermC	ermC	Strain is not available for distribution from DTU Food	Macrolide	PCR pos. control (ermC)
Bacillus subtilis	B. subtilis ERMK/pEC1001 S-S ermK/Dk	ermDK		Macrolide	PCR pos. control (erm DK)
E.coli	E. coli/ pJ4026 Birte Vester ermC	ermE		Macrolide	PCR pos. control (ermE)
L.reuteri	L. reuteri /pGT633 ermGT G.W. Tannock	ermGT		Macrolide	PCR pos. control (ermGT)
Bacillus subtilis	B. subtilis ERMK/pEC1001 S-S ermK/Dk	ermK		Macrolide	PCR pos. control (ermK)
E.coli	JIR2879 E. Coli DH5a/pJIR1120 ermQ	ermQ		Macrolide	PCR pos. control (ermQ)
Strep. pyogenes	02C1064	MefA		Macrolide	PCR pos. control (mefA)
Strep. pneumoniae	02H1175	MefE		Macrolide	PCR pos. control (mefE)
E.faecalis	E. faecalis JH2-2/pIP501 rep ermB	rep ermB		Macrolide	PCR pos. control enterococcal plasmids
Salmonella	P502212 DT104	GyrA		Nalidixic acid and Kanamycin ??	PCR pos. control (GyrA)
Salmonella	P502212 DT104	GyrB		Nalidixic acid and Kanamycin ??	PCR pos. control (GyrB)
Salmonella	P502212 DT104	ParC		Nalidixic acid and Kanamycin ??	PCR pos. control (ParC)
S.aureus	50A247 Mec A+ (Control for the mecA multiplex pcr)	MecA + nuc		Oxacillin	PCR pos. control (mecA+, nuc+)
S.aureus	23-88.10019 MecA- (Control for the mecA multiplex pcr)	nuc			PCR neg. control (mecA-, nuc+)
S. epidermidis	oxa 1.50 (Control for the mecA multiplex pcr)				PCR neg. control (mecA-, nuc-)
S.aureus	E 19771 tpA, Pen res	BlaZ-A		Penicillin	PCR pos. control (blaZ-A)
S.aureus	E 19778 tpB, Pen res	BlaZ-B		Penicillin	PCR pos. control (blaZ-B)
S.aureus	E 19659 tpC, Pen res	BlaZ-C		Penicillin	PCR pos. control (blaZ-C)
E. faecium	9730357-1	Pbp5		Penicillin	PCR pos. control (Pbp5)
S. aureus	BM 3093, pIP680	vatA		Streptogramins	PCR pos. control (vatA)
Staph.	9674438-1vatB-pos.	vatB		Streptogramins	PCR pos. control (vatB)
S.connii	BM10711, pIP1675	vatC		Streptogramins	PCR pos. control (vatC)
E. faecium	BM 4145	vatD		Streptogramins	PCR pos. control (vatD)
E. faecium	UW1965, vat(E)=Sat G	vatE		Streptogramins	PCR pos. control (vatE)
S. aureus	BM 3093 pIP680	vgaA		Streptogramins	PCR pos. control (vgaA)
S.aureus	BM12235, pIP1633	vgaB		Streptogramins	PCR pos. control (vgaB)
S. aureus	BM 3093 pIP680	vgaA		Streptogramins	PCR pos. control (vgaA)
S.connii	BM10711, pIP1675	vgaB		Streptogramins	PCR pos. control (vgaB)
E. faecalis	pEF418	aadE		Streptomycin	PCR pos. control (aadE)
S.Typhimurium	P502212 DT104	aadA		Streptomycin and Spectinomycin	PCR pos. control (aadA)
Salmonella	P502212 DT104 (alle DT104)	sul1		Sulphamethoxazole	PCR pos. control (sul1)
Salmonella	B(sul2)	sul2		Sulphamethoxazole	PCR pos. control (sul2)
Salmonella	C(sul3)	sul3		Sulphamethoxazole	PCR pos. control (sul3)
E.coli	pACYC177 (DHS/1682))	tet(31)		Tetracycline	PCR pos. control (tet31)
E.coli	tet(33)	tet(33)		Tetracycline	PCR pos. control (tet33)
E.coli	YA5605 pUC19::tet(39)	tet(39)		Tetracycline	PCR pos. control (tet39)
E.coli	tetA, NCTC 50078	tetA		Tetracycline	PCR pos. control (tetA)
E.coli	tetB, CSH50::Tn10	tetB		Tetracycline	PCR pos. control (tetB)
E.coli	tetC D07 pBR 322.Tet	tetC		Tetracycline	PCR pos. control (tetC)
E.coli	tetD C600 psl 106. Tet	tetD		Tetracycline	PCR pos. control (tetD)
E.coli	tetE HB 101 psl 1604	tetE		Tetracycline	PCR pos. control (tetE)
S.Typhimurium	P502212 DT104	tetG		Tetracycline	PCR pos. control (tetG)
G. Anatis	M64	tetH		Tetracycline	PCR pos. control (tetH)
S.aureus	pT181-like	tetK		Tetracycline	PCR pos. control (tetK)
S.aureus	pSTS9-like	tetL		Tetracycline	PCR pos. control (tetL)
S.intermedius	2567.chromosomal tet M	tetM		Tetracycline	PCR pos. control (tetM)
C.coli	BM 2509 pIP1433 plasmid	tetO		Tetracycline	PCR pos. control (tetO)
E.coli	Tet Q	tetQ		Tetracycline	PCR pos. control (tetQ)
Listeria monocytogenes	BM 4210, pIP811 plasmid	tetS		Tetracycline	PCR pos. control (tetS)
E.coli	Tet T	tetT		Tetracycline	PCR pos. control (tetT)
E.coli	Tet W	tetW		Tetracycline	PCR pos. control (tetW)
E.coli	plasmid with tet(Z)	tetZ		Tetracycline	PCR pos. control (tetZ)
E.faecalis	CG 110::Tn 916	Tn 916 (tetM)		Tetracycline	PCR pos. control tet(M)

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B.subtilis	CU2189 Transposon on chromosome	Tn5397		Tetracycline	PCR pos. control (tetTn5397)
S.Typhimurium	plamid i XL10gold (direkte fra plade) #1	dfr16		Trimethoprim	PCR pos. control (dfr16)
S. Mbandaka	12 (Gisele)	dfr20		Trimethoprim	PCR pos. control (dfr20)
E.faecium	BM 4147, Van A	VanA		Vancomycin	PCR pos. control (Van A)
E.faecalis	V 583, Van B	VanB		Vancomycin	PCR pos. control (Van B)
E.gallinarum	BM 4174, Van C	VanC		Vancomycin	PCR pos. control (Van C)
E.coli	CCUG 29188, O:157 H7, eae-gene	eae	Don't use before talking to someone about safety with O157	Virulens genes	PCR pos. control (eae)
E.coli	edl 933 O:157 H7	Verotoxin Shiga VT-1	Don't use before talking to someone about safety with O157	Virulens genes	PCR pos. control (VT-1)
E.coli	edl 933 O:157 H7	Verotoxin Shiga VT-2	Don't use before talking to someone about safety with O157	Virulens genes	PCR pos. control (VT-2)
E. coli	E004 TFF2 (CTX-M1)	cib			PCR pos. control (cib)
S.Typhimurium	DS61 1	Des/integrone			PCR pos. control (Integrone Des)
Salmonella	Integron class A (int 2)	Int II			PCR pos. control (class II int)
E.coli	Integron class L 3	Int III			PCR pos. control (class III int.)
E. coli	E004 TFF2 (CTX-M1)	IS-CTX			PCR pos. control ()
E. faecalis	OGIX, pAM373	pAM373			PCR pos. control (pAM373)
E. coli	MS16945	pAW105	Strain is not available for distribution from DTU Food		PCR pos. control (pAW105)
Bacillus thuringiensis	MS18750	pAW63 rep & Tn5401	Strain is not available for distribution from DTU Food		PCR pos. control (pAW63 rep)
E. faecalis	JH2-2/pIP501	pIP501			PCR pos. control (pIP501)
E. faecium	LM 0230: PHW800, pMMB 1	pMMB 1			PCR pos. control (pMMB 1)
E. faecium	U37 pRUM	pRUM			PCR pos. control (pRUM)
E. faecalis	pS86, Theta replikerende	pS86			PCR pos. control (pS86)
S.epidermidis	Elena E1	PsbK 203			PCR pos. control (PsbK 203)
Staphylococcus aureus	WBG1576	pUB101 rep	Strain is not available for distribution from DTU Food		PCR pos. control (pUB101 rep)
Staphylococcus aureus	FPR3757	pUSA02 replicon	Strain is not available for distribution from DTU Food		PCR pos. control (pUSA02 rep)
E. coli	Plasmid with RepIncA/C inserted into GeneHoc	RepIncA/C	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncA/C)
E. coli	Plasmid with RepIncB/O inserted into GeneHoc	RepIncB/O	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncB/O)
E. coli	Plasmid with RepIncFIA inserted into GeneHoc	RepIncFIA	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncFIA)
E. coli	Plasmid with RepIncFIB inserted into GeneHoc	RepIncFIB	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncFIB)
E. coli	Plasmid with RepIncFIC inserted into GeneHoc	RepIncFIC	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncFIC)
E. coli	Plasmid with RepIncFIIs inserted into GeneHoc	RepIncFIIs	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncFIIs)
E. coli	Plasmid with RepIncFrepB inserted into GeneHoc	RepIncFrepB	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncFrepB)
E. coli	Plasmid with RepIncHI1 inserted into GeneHoc	RepIncHI1	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncHI1)
E. coli	Plasmid with RepIncHI2 inserted into GeneHoc	RepIncHI2	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncHI2)
E. coli	Plasmid with RepIncI1 inserted into GeneHoc	RepIncI1	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncI1)
E. coli	Plasmid with RepIncK inserted into GeneHoc	RepIncK	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncK)
E. coli	Plasmid with RepIncL/M inserted into GeneHoc	RepIncL/M	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncL/M)
E. coli	Plasmid with RepIncN inserted into GeneHoc	RepIncN	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncN)
E. coli	Plasmid with RepIncP inserted into GeneHoc	RepIncP	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncP)
E. coli	Plasmid with RepIncQ inserted into GeneHoc	RepIncQ	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncQ)
E. coli	Plasmid with RepIncT inserted into GeneHoc	RepIncT	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncT)
E. coli	Plasmid with RepIncW inserted into GeneHoc	RepIncW	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncW)
E. coli	Plasmid with RepIncX inserted into GeneHoc	RepIncX	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncX)
E. coli	Plasmid with RepIncY inserted into GeneHoc	RepIncY	Strain is not available for distribution from DTU Food		PCR pos. control (RepIncY)