

SUPPLEMENTARY MATERIALS

Supplementary Figure S1

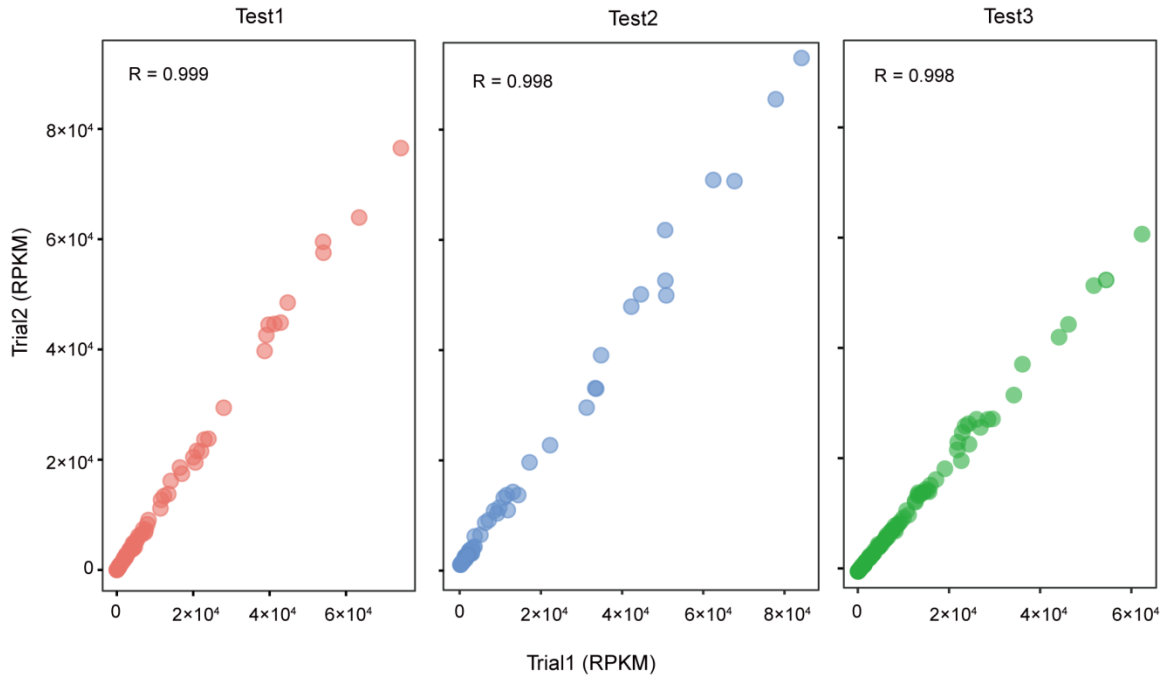


Figure S1. Consistency of amplicon sequencing method in different trials. Reads from targeted amplicons of three individual test samples in Tial 2 were subsampled to same depth as reads in Trail 1. Pearson correlation coefficients are shown in the diagram.

Supplementary Figure S2

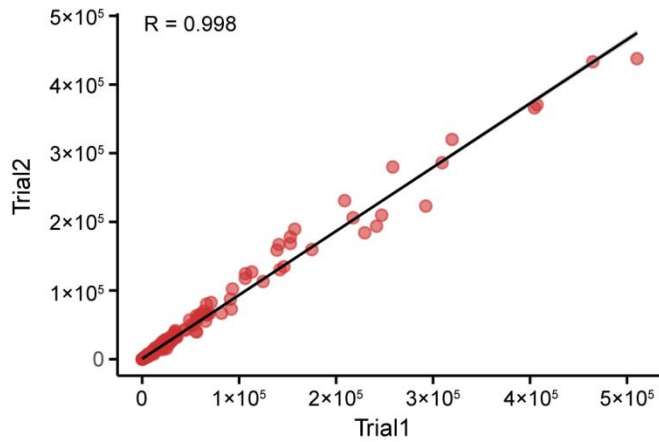


Figure S2. Consistency of amplicon sequencing method in different trials using upper quartile (UQ) normalization. Reads from targeted amplicons of three individual test samples in Trial 2 were subsampled to same depth as reads in Trail 1. Pearson correlation coefficients are shown in the diagram.

Supplementary Figure S3

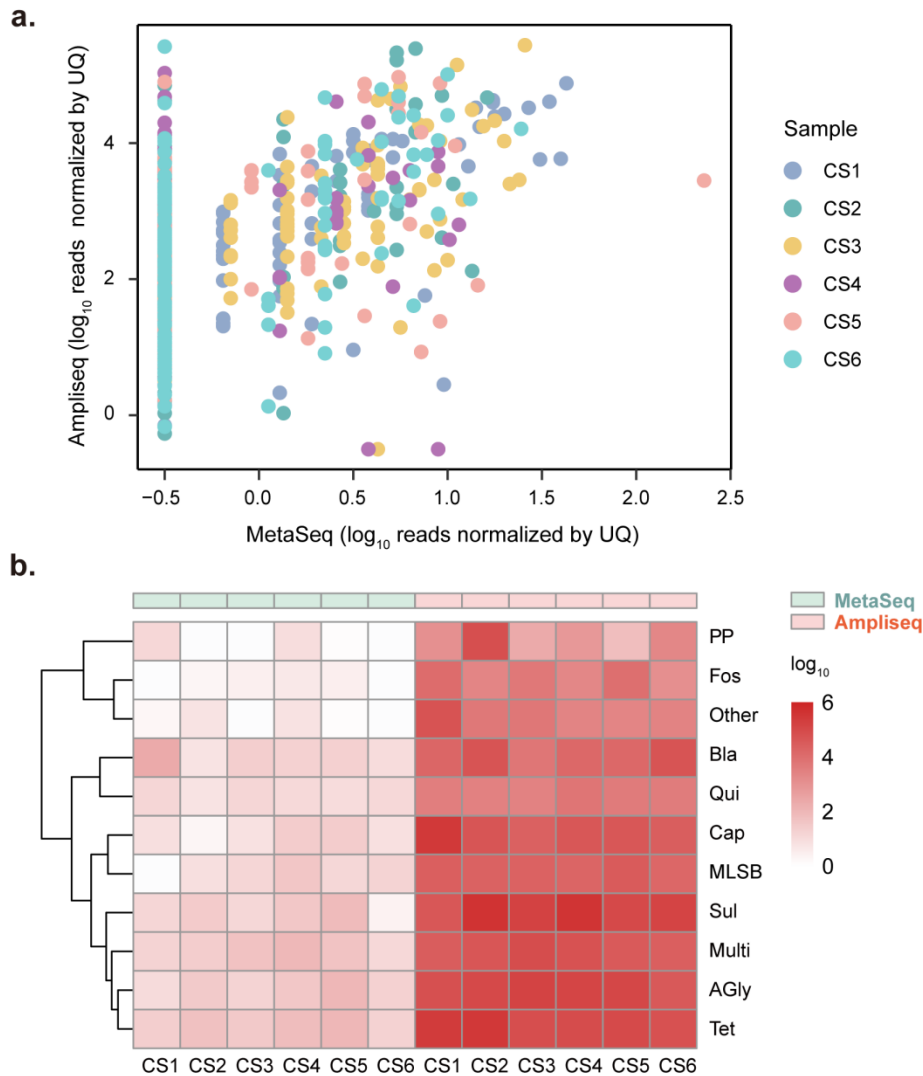


Figure S3. (a) Reads (normalized by upper quartile) mapping to the detected genes between MetaSeq and AmpliSeq. Genes only screened by AmpliSeq are showed in initial values of the abscissa axis. (b) Abundance of ARGs in AmpliSeq and MetaSeq. ARGs were classified into ten families (Sul: sulphonamides, AGly: aminoglycosides, Tet: tetracyclines, Bla: β -lactams, Cap: chloramphenicol, MLSB: macrolide-lincosamide-streptogramin B, Multi: multi-drug, PP: polypeptide, Fos: Fosfomycin, Qui: quinolone). Upper quartile (UQ) was used to normalized read counts and log-transformed to produce the heatmap.

Supplementary Figure S4

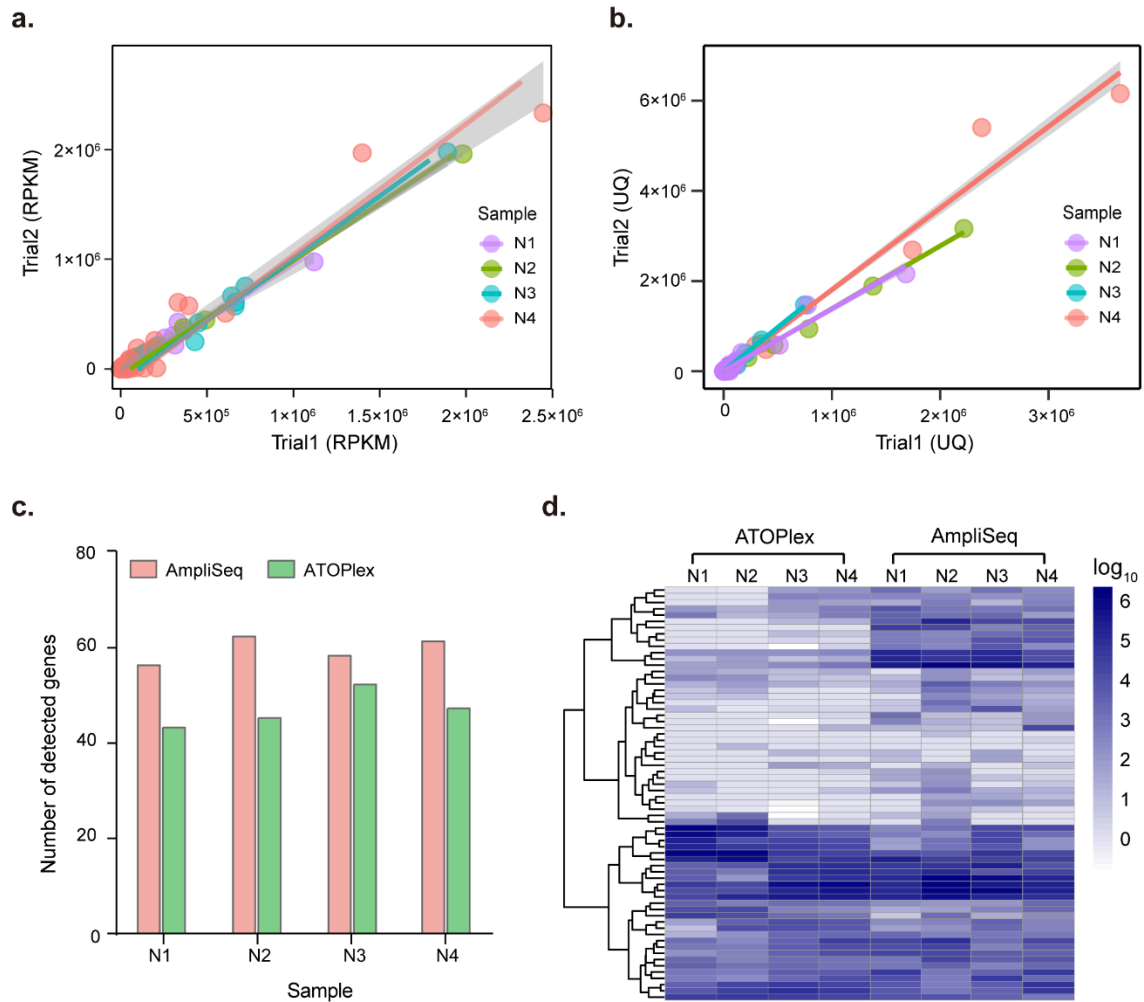


Figure S4. Application of designed method in ATOplex platform. (a) Assessment of the consistency of ATOplex method in different trials (normalized by UQ). (b) Assessment of the consistency of ATOplex method in different trials (normalized by RPKM). (c) Comparison of AmpliSeq and ATOplex methods in diversity of target genes. (d) Application of designed approach using AmpliSeq and ATOplex platforms. UQ was used to normalized read counts and log-transformed to produce the heat map.

Table S1. Details of the 278 target genes included in the custom amplicon sequencing panel.

Gene	Classification	AMR Gene Family	Resistance Mechanism	Accession number
gyrA	Quinolone	fluoroquinolone resistant gyrA	antibiotic target alteration	MG995190
qepA	Quinolone	fluoroquinolone efflux MFS transporter QepA gene family	antibiotic efflux	AB263754
qnrA1	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	AY070235
qnrB1	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	EF682133
qnrB4	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	DQ303921
qnrB8	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	EU043312
qnrC	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	EU917444
qnrD	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	FJ228229
qnrS1	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	AB187515
qnrS2	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	JF261185
qnrVC1	Quinolone	quinolone resistance protein (qnr)	antibiotic target protection	EU436855
optrA	Chloramphenicol	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	NG_048023
catA1	Chloramphenicol	chloramphenicol acetyltransferase (CAT)	antibiotic inactivation	V00622
catB3	Chloramphenicol	chloramphenicol acetyltransferase (CAT)	antibiotic inactivation	AJ009818
catB8	Chloramphenicol	chloramphenicol acetyltransferase (CAT)	antibiotic inactivation	AF227506
cmlA1	Chloramphenicol	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	M64556
fexA	Chloramphenicol	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AJ549214
floR	Chloramphenicol	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AF071555
pexA	Chloramphenicol	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	NG_048035
fabK	Chloramphenicol	Others	antibiotic inactivation	FJ390165
cfr	Chloramphenicol	Cfr 23S ribosomal RNA methyltransferase	antibiotic target alteration	AM408573

cmx	Chloramphenicol	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	U85507
aac6-II	Aminoglycoside	AAC(6')	antibiotic inactivation	L12710
aac6-Ia	Aminoglycoside	AAC(6')	antibiotic inactivation	M18967
aac6-Ib	Aminoglycoside	AAC(6')	antibiotic inactivation	JN108884
aac6-Iy	Aminoglycoside	AAC(6')	antibiotic inactivation	AF144880
aacA_aphD	Aminoglycoside	APH(2''), AAC(6')	antibiotic inactivation	GU565967
aacC1	Aminoglycoside	AAC(3)	antibiotic inactivation	U04610
aacC2	Aminoglycoside	AAC(3)	antibiotic inactivation	AY138987
aac	Aminoglycoside	AAC(6')	antibiotic inactivation	AJ628983
aadA1	Aminoglycoside	ANT(3'')	antibiotic inactivation	KR610434
aadA2	Aminoglycoside	ANT(3'')	antibiotic inactivation	JQ364967
aadA5	Aminoglycoside	ANT(3'')	antibiotic inactivation	KT175895
aadA9	Aminoglycoside	ANT(3'')	antibiotic inactivation	AJ420072
aadA	Aminoglycoside	ANT(3'')	antibiotic inactivation	MH257908
aadD-1	Aminoglycoside	ANT(4')	antibiotic inactivation	AF181950
aadE	Aminoglycoside	ANT(6)	antibiotic inactivation	AB699882
aph2-Id	Aminoglycoside	APH(2'')	antibiotic inactivation	AF016483
aph6-Ia	Aminoglycoside	APH(6)	antibiotic inactivation	AY971801
aphA1	Aminoglycoside	APH(3')	antibiotic inactivation	HM146784
armA	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	AY220558
rmtA	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	AB120321
rmtB2	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	JN968578
rmtC	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	AB194779
rmtD	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	DQ914960
rmtE	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	GU201947
rmtG	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	KJ004567

rmtH	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	KC544262
rmtf	Aminoglycoside	16S rRNA methyltransferase (G1405)	antibiotic target alteration	JQ808129
spcN	Aminoglycoside	spectinomycin phosphotransferase	antibiotic inactivation	AF170704
strA	Aminoglycoside	APH(3")	antibiotic inactivation	M96392
strB	Aminoglycoside	Aminoglycoside	antibiotic inactivation	EF493834
str	Aminoglycoside	Aminoglycoside	antibiotic inactivation	X92946
npmA	Aminoglycoside	16S rRNA methyltransferase (A1408)	antibiotic target alteration	AB261016
bla1	Beta_Lactamase	class A Bacillus anthracis Bla beta-lactamase	antibiotic inactivation	AF367983
blaACC-1	Beta_Lactamase	ACC beta-lactamase, classC	antibiotic inactivation	NG_048588
blaAIM-1	Beta_Lactamase	AIM beta-lactamase, classB	antibiotic inactivation	AM998375
blaBIC	Beta_Lactamase	BIC Beta-lactamase, classA	antibiotic inactivation	GQ260093
blaCMY	Beta_Lactamase	CMY beta-lactamase, classC	antibiotic inactivation	X92508
blaCTX-M-1	Beta_Lactamase	CTX-M beta-lactamase, classA	antibiotic inactivation	DQ915955
blaCTX-M-9	Beta_Lactamase	CTX-M beta-lactamase, classA	antibiotic inactivation	HM569735
blaDHA	Beta_Lactamase	DHA beta-lactamase, classC	antibiotic inactivation	Y16410
blaGES-1	Beta_Lactamase	GES beta-lactamase, classA	antibiotic inactivation	HQ170511
blaGIM-1	Beta_Lactamase	GIM beta-lactamase, classB	antibiotic inactivation	JF414726
blaIMP-1	Beta_Lactamase	IMP beta-lactamase, classA	antibiotic inactivation	DQ522237
blaKPC-1	Beta_Lactamase	KPC beta-lactamase, classB	antibiotic inactivation	AF297554
blaL1	Beta_Lactamase	L1 beta-lactamase	antibiotic inactivation	EF126059
blaNDM-5	Beta_Lactamase	NDM beta-lactamase, classB	antibiotic inactivation	NG_049337
blaOCH	Beta_Lactamase	OCH beta-lactamase, classC	antibiotic inactivation	LT840075
blaOKP	Beta_Lactamase	OKP beta-lactamase, classA	antibiotic inactivation	NG_049360
blaOXA-10	Beta_Lactamase	OXA beta-lactamase, classD	antibiotic inactivation	EU708817
blaOXA-23	Beta_Lactamase	OXA beta-lactamase, classD	antibiotic inactivation	FJ959346
blaOXA-48	Beta_Lactamase	OXA beta-lactamase, classD	antibiotic inactivation	AY236073

blaOXA-51	Beta_Lactamase	OXA beta-lactamase, classD	antibiotic inactivation	AJ309734
blaOXA-58	Beta_Lactamase	OXA beta-lactamase, classD	antibiotic inactivation	AY665723
blaOXY-1	Beta_Lactamase	OXY beta-lactamase, classA	antibiotic inactivation	Z30177
blaPAO-1	Beta_Lactamase	PDC beta-lactamase, classC	antibiotic inactivation	AY083595
blaPER-1	Beta_Lactamase	PER beta-lactamase, classA	antibiotic inactivation	GU944725
blaPER-2	Beta_Lactamase	PER beta-lactamase, classA	antibiotic inactivation	X93314
blaPSE-1	Beta_Lactamase	CARB beta-lactamase, classA	antibiotic inactivation	M69058
blaROB-1	Beta_Lactamase	ROB beta-lactamase, classA	antibiotic inactivation	DQ840517
blaSFO-1	Beta_Lactamase	FONA beta-lactamase, classA	antibiotic inactivation	AB003148
blaSHV-1	Beta_Lactamase	SHV beta-lactamase, classA	antibiotic inactivation	AF148850
blaSIM-1	Beta_Lactamase	SIM beta-lactamase, classB	antibiotic inactivation	JF731030
blaSPM-1	Beta_Lactamase	SPM beta-lactamase, classB	antibiotic inactivation	AY341249
blaTEM-1A	Beta_Lactamase	TEM beta-lactamase, classA	antibiotic inactivation	HM749966
blaTLA-1	Beta_Lactamase	TLA beta-lactamase, class A	antibiotic inactivation	AF148067
blaVEB-1	Beta_Lactamase	VEB beta-lactamase, classA	antibiotic inactivation	HM370393
blaVIM-2	Beta_Lactamase	VIM beta-lactamase, classB	antibiotic inactivation	KC907378
blaZ-32	Beta_Lactamase	blaZ beta-lactamase, classA	antibiotic inactivation	AP004832
cepA	Beta_Lactamase	cepA beta-lactamase	antibiotic inactivation	L13472
mecA	Beta_Lactamase	peptidoglycan synthesis	antibiotic target protection	NC_000913
carB-1	Beta_Lactamase	PSE family	antibiotic inactivation	HQ616211
pbp1a	Beta_Lactamase	penicillin-binding protein	antibiotic target protection	AF446215
pbp2a	Beta_Lactamase	penicillin-binding protein	antibiotic target protection	AF101780
pbp3	Beta_Lactamase	penicillin-binding protein	antibiotic target protection	AJ243120
pbp5	Beta_Lactamase	penicillin-binding protein	antibiotic target protection	AF375986
tet32	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	EU722333
tet34	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	AB061440

tet35	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	AF353562
tet36	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	AJ514254
tet37	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	AF540889
tetAP	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AB054980
tetA	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	X00006
tetBP	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	NC_010937
tetB	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AP000342
tetC	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	NC_003123
tetD	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AF467077
tetE	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	L06940
tetG	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	S52437
tetH	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	Y16103
tetJ-1	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	ACLE01000065
tetK	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	U38428
tetL	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	HM235948
tetM	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	X92947
tetO	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	M18896
tetQ-3	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	U73497
tetR	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic target alteration, antibiotic efflux	KF697108
tetS-3	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	X92946
tetT	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	L42544
tetU	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	U01917
tetV	Tetracycline	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AF030344
tetW	Tetracycline	tetracycline-resistant ribosomal protection protein	antibiotic target protection	DQ060146
tetX	Tetracycline	tetracycline inactivation enzyme	antibiotic inactivation	MT022428

tetX3	Tetracycline	tetracycline inactivation enzyme	antibiotic inactivation	MK134375
tetX4	Tetracycline	tetracycline inactivation enzyme	antibiotic inactivation	MK134376
vanA	Polypeptide	glycopeptide resistance gene cluster, van ligase	antibiotic target alteration	FJ866609
vanB	Polypeptide	glycopeptide resistance gene cluster, van ligase	antibiotic target alteration	AF192329
vanC	Polypeptide	glycopeptide resistance gene cluster, van ligase	antibiotic target alteration	EU151752
vanG-1	Polypeptide	glycopeptide resistance gene cluster, van ligase	antibiotic target alteration	AY271782
vanHB-1	Polypeptide	vanH, glycopeptide resistance gene cluster	antibiotic target alteration	AF192329
vanHD-1	Polypeptide	vanH, glycopeptide resistance gene cluster	antibiotic target alteration	AB242319
vanM	Polypeptide	glycopeptide resistance gene cluster, van ligase	antibiotic target alteration	AF288163
vanRA	Polypeptide	glycopeptide resistance gene cluster, vanR	antibiotic target alteration	FJ866609
vanRB	Polypeptide	glycopeptide resistance gene cluster, vanR	antibiotic target alteration	AF192329
vanRC-1	Polypeptide	glycopeptide resistance gene cluster, vanR	antibiotic target alteration	AF162694
vanRD-1	Polypeptide	glycopeptide resistance gene cluster, vanR	antibiotic target alteration	AB242319
vanSB-1	Polypeptide	vanS, glycopeptide resistance gene cluster	antibiotic target alteration	AF192329
vanTC	Polypeptide	glycopeptide resistance gene cluster, vanT	antibiotic target alteration	AF162694
vanTG-1	Polypeptide	glycopeptide resistance gene cluster, vanT	antibiotic target alteration	AY271782
vanWB	Polypeptide	vanW, glycopeptide resistance gene cluster	antibiotic target alteration	AF192329
vanWG	Polypeptide	vanW, glycopeptide resistance gene cluster	antibiotic target alteration	AY271782
vanXA-1	Polypeptide	vanX, glycopeptide resistance gene cluster	antibiotic target alteration	FJ866609
vanXB-1	Polypeptide	vanX, glycopeptide resistance gene cluster	antibiotic target alteration	AF192329
vanXD-1	Polypeptide	vanX, glycopeptide resistance gene cluster	antibiotic target alteration	AB242319
vanYB-1	Polypeptide	vanY, glycopeptide resistance gene cluster	antibiotic target alteration	AF192329
vanYD-1	Polypeptide	vanY, glycopeptide resistance gene cluster	antibiotic target alteration	AB242319
vanRC	Polypeptide	glycopeptide resistance gene cluster, vanR	antibiotic target alteration	EU151753
vanSA	Polypeptide	vanS, glycopeptide resistance gene cluster	antibiotic target alteration	M97297
vanSC	Polypeptide	vanS, glycopeptide resistance gene cluster	antibiotic target alteration	AF162694

vanSE	Polypeptide	vanS, glycopeptide resistance gene cluster	antibiotic target alteration	AY700375
vanTE	Polypeptide	glycopeptide resistance gene cluster, vanT	antibiotic target alteration	FJ872411
mcr-1	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	KY853650
mcr-2	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	LT598652
mcr-3-17	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	MH332767
mcr-3-1	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	KY924928
mcr-4	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	MF543359
mcr-5	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	KY807921
mcr-6	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	MF176240
mcr-7	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	MG267386
mcr-8	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	MG736312
mcr-9	Polypeptide	MCR phosphoethanolamine transferase	antibiotic target alteration	MK791138
dfrA1	Sulfonamides	trimethoprim resistant dihydrofolate reductase dfr	antibiotic target replacement	MH574896
dfrA	Sulfonamides	trimethoprim resistant dihydrofolate reductase dfr	antibiotic target replacement	GU565967
dfrK	Sulfonamides	trimethoprim resistant dihydrofolate reductase dfr	antibiotic target replacement	FN390947
dfrA12	Sulfonamides	trimethoprim resistant dihydrofolate reductase dfr	antibiotic target replacement	JN108892
folA	Sulfonamides	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	EU871432
sul1	Sulfonamides	sulfonamide resistant sul	antibiotic target replacement	EF667294
sul2	Sulfonamides	sulfonamide resistant sul	antibiotic target replacement	DQ464881
sulA	Sulfonamides	sulfonamide resistant sul	antibiotic inactivation	KJ831060
fosA3	Fosfomycin	glutathione S-transferase	antibiotic inactivation	KX245440
fosA	Fosfomycin	glutathione S-transferase	antibiotic inactivation	M85195
fosB	Fosfomycin	fosfomycin thiol transferase	antibiotic inactivation	X89875
fosXCC	Fosfomycin	fosfomycin thiol transferase	antibiotic inactivation	KC876749
fosX	Fosfomycin	fosfomycin thiol transferase	antibiotic inactivation	NG_047899
vatA	MLSB	streptogramin vat acetyltransferase	antibiotic inactivation	L07778

vatB	MLSB	streptogramin vat acetyltransferase	antibiotic inactivation	U19459
vatC	MLSB	streptogramin vat acetyltransferase	antibiotic inactivation	AF015628
vatE	MLSB	streptogramin vat acetyltransferase	antibiotic inactivation	AF242872
vgaA	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	M90056
vgaA-V	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	AF186237
vgaB	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	U82085
vgaC	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	NG_048559
vgaE	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	FR772051
vgbB	MLSB	streptogramin vgb lyase	antibiotic inactivation	AF015628
lnuA	MLSB	lincosamide nucleotidyltransferase (LNU)	antibiotic inactivation	M14039
lnuB	MLSB	lincosamide nucleotidyltransferase (LNU)	antibiotic inactivation	AJ238249
lnuC	MLSB	lincosamide nucleotidyltransferase (LNU)	antibiotic inactivation	AY928180
lmrA	MLSB	lmrAB opero	antibiotic target protection	X59926
lsaB	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	NG_047933
lsaE	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	JX560992
speA	MLSB	other/efflux	antibiotic efflux	KY594413
ereA-2	MLSB	macrolide esterase	antibiotic inactivation	AF099140
ereB	MLSB	macrolide esterase	antibiotic inactivation	X03988
mefB	MLSB	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	FJ196385
mphA	MLSB	macrolide phosphotransferase (MPH)	antibiotic inactivation	D16251
mphB	MLSB	macrolide phosphotransferase (MPH)	antibiotic inactivation	D85892
mphC	MLSB	macrolide phosphotransferase (MPH)	antibiotic inactivation	AB013298
mefA	MLSB	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	AF227521
msrD	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	AF274302
msrA	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	X52085
msrC	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	AY004350

erm34	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	AY234334
erm35	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	AF319779
erm36	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	AF462611
ermA	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	X03216
ermB-18	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	X66468
ermC	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	V01278
ermD	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	M29832
ermE	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	X51891
ermF	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	M17124
ermG	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	M15332
ermK	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	M77505
ermT	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	M64090
ermX	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	M36726
ermY	MLSB	Erm 23S ribosomal RNA methyltransferase	antibiotic target alteration	AB014481
mel	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	KU984333
oleC	MLSB	ATP-binding cassette (ABC) antibiotic efflux pump	antibiotic efflux	L06249
oqxA	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	EU370913
oqxB	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	EU370913
cmeA	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	AB894099
cmeB	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	AB894099
cmeC	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	AB894099
RE-cmeA	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	KT778507
RE-cmeB	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	KT778507
RE-cmeC	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	KT778507
tolC	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	FJ768952
mepA	Multidrug	multidrug and toxic compound extrusion (MATE) transporter	antibiotic efflux	AY661734

ceoA	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	U97042
adeA	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	KX154813
cmr	Multidrug	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	U44900
mdet1	Multidrug	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic inactivation	AJ012115
mdtE	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic inactivation	NC_000913
pikR1	Multidrug	erm_methylase	antibiotic inactivation	AF079138
pikR2	Multidrug	erm_methyltransferase	antibiotic inactivation	AF079138
mtrC	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	HQ712081
mtrD	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	HQ706341
qacH	Multidrug	small multidrug resistanc (SMR) efflux pump	antibiotic efflux	AY816216
qac	Multidrug	small multidrug resistanc (SMR) efflux pump	antibiotic efflux	U81980
rarD	Multidrug	major facilitator superfamily (MFS) antibiotic efflux pump	antibiotic efflux	L02122
sdeB	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	CP033162
ttgA	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	AF031417
ttgB	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	AF031417
qacA	Multidrug	small multidrug resistanc (SMR) efflux pump	antibiotic efflux	NG_061385
qacE	Multidrug	small multidrug resistanc (SMR) efflux pump	antibiotic efflux	FJ663011
nisB	Multidrug	resistance-nodulation-cell division (RND) antibiotic efflux pump	antibiotic efflux	X68307
bacA	Bacitracin	undecaprenol kinase	antibiotic inactivation	AF169967
bcrB	Bacitracin	ATP-binding cassette (ABC) efflux pump	antibiotic efflux	KX772240
bcrR	Bacitracin	ATP-binding cassette (ABC) efflux pump	antibiotic efflux	KX772240
nimE	Nitroimidazoles	pyridoxamine 5'-phosphate oxidase protein	antibiotic inactivation	NG_048015
pncA	Antituberculosis	Other/efflux	antibiotic inactivation	KY659393
sat	Others	Transposase	transposase	AB699882
IS613	Others	Transposase	transposase	MH025900
ISAPI1	Others	Transposase	transposase	MF175187

ISAb125	Others	Transposase	transposase	NC_022740
Tn21	Others	Transposase	transposase	KY913897
Tp614	Others	Transposase	transposase	DQ831146
tnpA	Others	Transposase	transposase	JX570731
intl1	Others	integron integrase	integron	NZ_CP039294
merA	Hg	mercury(II) reductase	metal ions reduction	AB024961
merB	Hg	Organomercurial lyase	organometallics reduction	HQ144191
pbrD	Pb	Lead binding protein	metal ions binding	X71400
cadB	Cd	Cadmium binding protein	metal ions binding	M67452
cadD	Cd	Cadmium binding protein	metal ions binding	AF134905
copA	Co	P-type ATPases	metal accumulation	AF187849
copB	Co	P-type ATPases	metal accumulation	AF187849
cueO	Co	Copper detoxification	metal ions oxidation	NC_000913
cusF	Co	Copper accumulation	metal binding	KC146966
chrA	Cr	Chromate reductase	metal ions binding	NC_000964
NiCotT	Ni	Nickel cobalt transferase	metal accumulation	FUGF01000049
yfeA	Zn	periplasmic-binding protein; ABC transporter system	metal transport	U50597
zntA	Zn	Zn(II)-export protein	metal transport	NC_000913
zntB	Zn	Zn(II)-export protein	metal transport	NC_000913
ceuE	Fe	siderophore transport protein	metal transport	FN555004
czcA	Co/Zn/Cd	resistance-nodulation-cell division (RND) antibiotic efflux pump	metal transport	D67044
czcC	Co/Zn/Cd	outer membrane protein	target protection	D67044
arsA	As	ATPase arsA	metal transport	KY271405
arsB	As	a membrane pump that functions alone or with ATPase arsA	metal transport	AB004659

Table S2. 92 unique genes identified by AmpliSeq compared with MetaSeq.

Classification	Resistance gene	Mechanism	Accession number
Quinolone	<i>qnrA1</i>	antibiotic target protection	AY070235
	<i>qnrC</i>	antibiotic target protection	EU917444
	<i>aac6-II</i>	antibiotic inactivation	L12710
	<i>aac6-ly</i>	antibiotic inactivation	AF144880
	<i>aadA</i>	antibiotic inactivation	MH257908
	<i>aadD-1</i>	antibiotic inactivation	AF181950
Aminoglycoside	<i>aph2-Id</i>	antibiotic inactivation	AF016483
	<i>armA</i>	antibiotic target alteration	AY220558
	<i>rmtf</i>	antibiotic target alteration	JQ808129
	<i>spcN</i>	antibiotic inactivation	AF170704
	<i>strB</i>	antibiotic inactivation	EF493834
	<i>npmA</i>	antibiotic target alteration	AB261016
	<i>bla1</i>	antibiotic inactivation	AF367983
	<i>bla_{CMY}</i>	antibiotic inactivation	X92508
	<i>bla_{DHA}</i>	antibiotic inactivation	Y16410
β -Lactamase	<i>bla_{GES-1}</i>	antibiotic inactivation	HQ170511
	<i>bla_{KPC-1}</i>	antibiotic inactivation	AF297554
	<i>bla_{OCH}</i>	antibiotic inactivation	LT840075
	<i>bla_{OKP}</i>	antibiotic inactivation	NG_049360
	<i>bla_{OXA-23}</i>	antibiotic inactivation	FJ959346

	<i>bla</i> _{OXA-51}	antibiotic inactivation	AJ309734
	<i>bla</i> _{OXA-58}	antibiotic inactivation	AY665723
	<i>bla</i> _{OXY-1}	antibiotic inactivation	Z30177
	<i>bla</i> _{PAO-1}	antibiotic inactivation	AY083595
	<i>bla</i> _{PER-1}	antibiotic inactivation	GU944725
	<i>bla</i> _{PER-2}	antibiotic inactivation	X93314
	<i>bla</i> _{PSE-1}	antibiotic inactivation	M69058
	<i>bla</i> _{ROB-1}	antibiotic inactivation	DQ840517
	<i>bla</i> _{SHV-1}	antibiotic inactivation	AF148850
	<i>bla</i> _{SPM-1}	antibiotic inactivation	AY341249
	<i>bla</i> _{VIM-2}	antibiotic inactivation	KC907378
	<i>cepA</i>	antibiotic inactivation	L13472
	<i>pbp2a</i>	antibiotic target protection	AF101780
	<i>pbp5</i>	antibiotic target protection	AF375986
	<i>tet32</i>	antibiotic target protection	EU722333
	<i>tetB</i>	antibiotic efflux	AP000342
	<i>tetD</i>	antibiotic efflux	AF467077
	<i>tetE</i>	antibiotic efflux	L06940
Tetracycline	<i>tetH</i>	antibiotic efflux	Y16103
	<i>tetJ-1</i>	antibiotic efflux	ACLE01000065
	<i>tetS-3</i>	antibiotic target protection	X92946
	<i>tetU</i>	antibiotic efflux	U01917
Polypeptide	<i>vanA</i>	antibiotic target alteration	FJ866609

	<i>vanB</i>	antibiotic target alteration	AF192329
	<i>vanC</i>	antibiotic target alteration	EU151752
	<i>vanHB-1</i>	antibiotic target alteration	AF192329
	<i>vanRA</i>	antibiotic target alteration	FJ866609
	<i>vanRB</i>	antibiotic target alteration	AF192329
	<i>vanSB-1</i>	antibiotic target alteration	AF192329
	<i>vanTC</i>	antibiotic target alteration	AF162694
	<i>vanTG-1</i>	antibiotic target alteration	AY271782
	<i>vanXA-1</i>	antibiotic target alteration	FJ866609
	<i>vanRC</i>	antibiotic target alteration	EU151753
	<i>vanSA</i>	antibiotic target alteration	M97297
	<i>vanSC</i>	antibiotic target alteration	AF162694
	<i>mcr-2</i>	antibiotic target alteration	LT598652
	<i>mcr-4</i>	antibiotic target alteration	MF543359
	<i>mcr-5</i>	antibiotic target alteration	KY807921
	<i>mcr-6</i>	antibiotic target alteration	MF176240
	<i>mcr-7</i>	antibiotic target alteration	MG267386
	<i>mcr-8</i>	antibiotic target alteration	MG736312
Sulfonamides	<i>dfrA1</i>	antibiotic target replacement	MH574896
MLSB	<i>vatA</i>	antibiotic inactivation	L07778
	<i>vatC</i>	antibiotic inactivation	AF015628
	<i>vgaA</i>	antibiotic efflux	M90056
	<i>vgaA-V</i>	antibiotic efflux	AF186237
	<i>vgaC</i>	antibiotic efflux	NG_048559

	<i>vgaE</i>	antibiotic efflux	FR772051
	<i>vgbB</i>	antibiotic inactivation	AF015628
	<i>lnuC</i>	antibiotic inactivation	AY928180
	<i>lmrA</i>	antibiotic target protection	X59926
	<i>lsaB</i>	antibiotic efflux	NG_047933
	<i>ereA-2</i>	antibiotic inactivation	AF099140
	<i>ereB</i>	antibiotic inactivation	X03988
	<i>mphB</i>	antibiotic inactivation	D85892
	<i>msrA</i>	antibiotic efflux	X52085
	<i>msrC</i>	antibiotic efflux	AY004350
	<i>erm34</i>	antibiotic target alteration	AY234334
	<i>erm35</i>	antibiotic target alteration	AF319779
	<i>ermD</i>	antibiotic target alteration	M29832
	<i>ermK</i>	antibiotic target alteration	M77505
	<i>cmeB</i>	antibiotic efflux	AB894099
	<i>RE-cmeA</i>	antibiotic efflux	KT778507
	<i>RE-cmeB</i>	antibiotic efflux	KT778507
Multidrug	<i>RE-cmeC</i>	antibiotic efflux	KT778507
	<i>adeA</i>	antibiotic efflux	KX154813
	<i>mdet1</i>	antibiotic inactivation	AJ012115
	<i>pikR1</i>	antibiotic inactivation	AF079138
	<i>pikR2</i>	antibiotic inactivation	AF079138

<i>qac</i>	antibiotic efflux	U81980
<i>qacA</i>	antibiotic efflux	NG_061385
<i>nisB</i>	antibiotic efflux	X68307

Table S3. Identification of antibiotic efflux pump genes in poultry, swine, cow, and human samples.

Classification	Resistance gene	Mechanism	Poultry (20 samples)	Swine (16 samples)	Cow (12 samples)	Human (16 samples)	Total
Tetracycline	<i>tetA</i>		100%	93.75%	100%	93.75%	96.88%
	<i>tetAP</i>		70.00%	93.75%	100%	50.00%	76.56%
	<i>tetB</i>		100%	75.00%	83.33%	43.75%	76.56%
	<i>tetBP</i>		85.00%	93.75%	100%	75.00%	87.50%
	<i>tetD</i>		45.00%	—	41.67%	18.75%	26.56%
	<i>tetE</i>		30.00%	6.25%	16.67%	—	14.06%
	<i>tetG</i>		100%	81.25%	100%	6.25%	71.88%
	<i>tetH</i>		85.00%	75.00%	66.67%	—	57.81%
	<i>tetK</i>		85.00%	18.75%	75.00%	—	45.31%
	<i>tetL</i>		100%	75.00%	100%	—	68.75%
	<i>tetU</i>		—	—	—	6.25%	1.56%
	<i>tetV</i>		10.00%	—	25.00%	—	7.81%
Chloramphenico I	<i>optrA</i>	ABC ^b	100%	43.75%	100%	—	60.94%
	<i>cmIA1</i>	MFS ^c	100%	93.75%	100%	87.50%	95.31%
	<i>cmx</i>		100%	93.75%	100%	6.25%	75.00%

	<i>fexA</i>		100%	62.50%	100%	12.50%	68.75%
	<i>floR</i>		100%	100%	100%	100%	100%
	<i>lsaB</i>		50.00%	18.75%	58.33%	—	31.25%
	<i>lsaE</i>		95.00%	100%	100%	18.75%	78.13%
	<i>mel</i>		100%	93.75%	91.67%	6.25%	73.44%
	<i>msrA</i>		50.00%	6.25%	41.67%	—	25.00%
	<i>msrC</i>	ABC ^b	35.00%	18.75%	—	31.25%	23.44%
	<i>msrD</i>		90.00%	93.75%	100%	93.75%	93.75%
MLS ^B ^a	<i>vgaA</i>		15.00%	—	—	—	4.69%
	<i>vgaAV</i>		20.00%	—	8.33%	—	7.81%
	<i>vgaC</i>		75.00%	—	8.33%	—	25.00%
	<i>vgaE</i>		90.00%	6.25%	66.67%	—	42.19%
	<i>mefA</i>		95.00%	93.75%	100%	93.75%	95.31%
	<i>mefB</i>	MFS ^c	85.00%	50.00%	100%	18.75%	62.50%
<i>oleC</i>	30.00%		18.75%	50.00%	—	23.44%	
Bacitracin	<i>bcrB</i>	ABC ^b	100%	12.50%	100%	75.00%	71.88%
	<i>bcrR</i>		90.00%	12.50%	100%	—	50.00%
	<i>cmr</i>	MFS ^c	95.00%	93.75%	91.67%	93.75%	93.75%
<i>rarD</i>	90.00%		87.50%	91.67%	93.75%	90.63%	
Multidrug	<i>adeA</i>		5.00%	—	—	—	1.56%
	<i>ceoA</i>	RND ^d	15.00%	—	—	—	4.69%
	<i>cmeA</i>		15.00%	—	—	—	4.69%
	<i>cmeB</i>		20.00%	—	—	—	6.25%

<i>cmeC</i>		10.00%	—	—	—	3.13%
<i>mdtE</i>		100%	93.75%	91.67%	87.50%	93.75%
<i>mtrD</i>		—	—	16.67%	—	3.13%
<i>nisB</i>		5.00%	6.25%	—	—	3.13%
<i>oqxA</i>		95.00%	56.25%	66.67%	93.75%	79.69%
<i>oqxB</i>		100%	87.50%	91.67%	93.75%	93.75%
<i>RE-cmeA</i>		20.00%	—	—	—	4.69%
<i>RE-cmeB</i>		20.00%	—	—	—	6.25%
<i>RE-cmeC</i>		20.00%	—	—	—	6.25%
<i>sdeB</i>		60.00%	31.25%	50.00%	37.50%	45.31%
<i>tolC</i>		100%	93.75%	91.67%	100%	96.88%
<i>ttgA</i>		25.00%	6.25%	41.67%	—	17.19%
<i>ttgB</i>		35.00%	18.75%	58.33%	—	26.56%
<i>qac</i>		5.00%	—	—	—	1.56%
<i>qacA</i>	SMR ^e	5.00%	—	8.33%	—	3.13%
<i>qacE</i>		10.00%	31.25%	25.00%	—	17.19%
<i>qacH</i>		100%	56.25%	91.67%	12.50%	65.63%

a: MLSB: Macrolide-lincosamide-streptogramin B; b: ABC: ATP-binding cassette antibiotic efflux pump; c: MFS: major facilitator superfamily antibiotic efflux pump; d: RND: resistance-nodulation-cell division antibiotic efflux pump; e: SMR: major facilitator superfamily antibiotic efflux pump.

Table S4. Comparison of amplicon sequencing in AmpliSeq and ATOplex technology

Sample	AmpliSeq			ATOplex			Gain ^a
	No. of raw reads	No. of aligned reads	Percent (%)	No. of raw reads	No. of aligned reads	Percent (%)	
N1	441,462	332,059	75.22	10,566,235	9,304,330	88.06	1.17
N2	887,932	781,502	88.01	4,963,350	4,352,514	87.69	1.00
N3	662,783	517,486	78.08	18,731,004	14,626,298	78.09	1.00
N4	1,085,548	988,067	91.02	5,295,532	4,497,448	84.93	0.93
Average	769,431	654,779	85.10	9,889,030	8195147.5	82.87	0.97

a: The results of dividing on-target percentage of AmpliSeq by ATOplex.

Table S5. The information of amplicon sequences

Target gene	Start	End	Pool
IS613_MH025900	32	215 AMPL3931677	Pool=1
IS613_MH025900	204	429 AMPL3931678	Pool=2
IS613_MH025900	418	638 AMPL3931679	Pool=1
IS613_MH025900	627	846 AMPL3931680	Pool=2
IS613_MH025900	835	1057 AMPL3931681	Pool=1
IS613_MH025900	1046	1247 AMPL3931682	Pool=2
ISAPI1_MF175187	24	233 AMPL3931683	Pool=1
ISAPI1_MF175187	222	426 AMPL3931684	Pool=2
ISAPI1_MF175187	415	555 AMPL3931685	Pool=1

ISAPI1_MF175187	544	662 AMPL3931686	Pool=2
ISAPI1_MF175187	651	873 AMPL3931687	Pool=1
ISAb125_NC_022740	51	155 AMPL3932028	Pool=1
ISAb125_NC_022740	144	364 AMPL3932029	Pool=2
ISAb125_NC_022740	353	568 AMPL3932030	Pool=1
ISAb125_NC_022740	557	767 AMPL3932031	Pool=2
ISAb125_NC_022740	756	950 AMPL3932032	Pool=1
QnrA1_1_AY070235	42	249 AMPL3931106	Pool=1
QnrA1_1_AY070235	238	454 AMPL3931107	Pool=2
QnrA1_1_AY070235	443	625 AMPL3931108	Pool=1
QnrB1_1_EF682133	54	182 AMPL3931109	Pool=1
QnrB1_1_EF682133	171	393 AMPL3931110	Pool=2
QnrB1_1_EF682133	382	605 AMPL3931111	Pool=1
QnrB4_1_DQ303921	58	154 AMPL3931112	Pool=1
QnrB4_1_DQ303921	143	365 AMPL3931113	Pool=2
QnrB4_1_DQ303921	354	582 AMPL3931114	Pool=1
QnrB8_1_EU043312	25	160 AMPL3931115	Pool=2
QnrB8_1_EU043312	149	373 AMPL3931116	Pool=1
QnrB8_1_EU043312	362	580 AMPL3931117	Pool=2
QnrC_1_EU917444	63	212 AMPL3931118	Pool=1
QnrC_1_EU917444	201	377 AMPL3931119	Pool=2
QnrC_1_EU917444	366	594 AMPL3931120	Pool=1
QnrD_1_FJ228229	36	223 AMPL3931121	Pool=2
QnrD_1_FJ228229	212	420 AMPL3931122	Pool=1
QnrD_1_FJ228229	409	575 AMPL3931123	Pool=2
QnrS1_1_AB187515	35	187 AMPL3931124	Pool=1

QnrS1_1_AB187515	176	375 AMPL3931125	Pool=2
QnrS1_1_AB187515	364	587 AMPL3931126	Pool=1
QnrS2_1_JF261185	22	225 AMPL3931127	Pool=2
QnrS2_1_JF261185	214	374 AMPL3931128	Pool=1
QnrS2_1_JF261185	363	587 AMPL3931129	Pool=2
QnrVC1_1_EU436855	52	189 AMPL3931130	Pool=1
QnrVC1_1_EU436855	178	380 AMPL3931131	Pool=2
QnrVC1_1_EU436855	369	587 AMPL3931132	Pool=1
RE_cmeA_KT778507	55	191 AMPL3931590	Pool=2
RE_cmeA_KT778507	180	390 AMPL3931591	Pool=1
RE_cmeA_KT778507	373	558 AMPL3931592	Pool=2
RE_cmeA_KT778507	544	733 AMPL3931593	Pool=1
RE_cmeA_KT778507	804	888 AMPL3931595	Pool=2
RE_cmeA_KT778507	862	1072 AMPL3931596	Pool=1
RE_cmeB_KT778507	50	125 AMPL3931597	Pool=2
RE_cmeB_KT778507	114	326 AMPL3931598	Pool=1
RE_cmeB_KT778507	315	521 AMPL3931599	Pool=2
RE_cmeB_KT778507	519	686 AMPL3931600	Pool=1
RE_cmeB_KT778507	675	880 AMPL3931601	Pool=2
RE_cmeB_KT778507	869	1032 AMPL3931602	Pool=1
RE_cmeB_KT778507	1070	1214 AMPL3931604	Pool=2
RE_cmeB_KT778507	1200	1344 AMPL3931605	Pool=1
RE_cmeB_KT778507	1333	1546 AMPL3931606	Pool=2
RE_cmeB_KT778507	1512	1704 AMPL3931607	Pool=1
RE_cmeB_KT778507	1693	1883 AMPL3931608	Pool=2
RE_cmeB_KT778507	1872	2083 AMPL3931609	Pool=1

RE_cmeB_KT778507	2072	2258 AMPL3931610	Pool=2
RE_cmeB_KT778507	2237	2440 AMPL3931611	Pool=1
RE_cmeB_KT778507	2429	2515 AMPL3931612	Pool=2
RE_cmeB_KT778507	2504	2725 AMPL3931613	Pool=1
RE_cmeB_KT778507	2714	2939 AMPL3931614	Pool=2
RE_cmeC_KT778507	44	159 AMPL3929745	Pool=1
RE_cmeC_KT778507	148	298 AMPL3931619	Pool=2
RE_cmeC_KT778507	287	472 AMPL3931620	Pool=1
RE_cmeC_KT778507	461	671 AMPL3931621	Pool=2
RE_cmeC_KT778507	660	859 AMPL3931622	Pool=1
RE_cmeC_KT778507	848	1045 AMPL3931623	Pool=2
RE_cmeC_KT778507	1034	1247 AMPL3931624	Pool=1
RE_cmeC_KT778507	1236	1446 AMPL3931625	Pool=2
Tn21_KY913897	50	253 AMPL3931688	Pool=1
Tn21_KY913897	85	311 AMPL3931689	Pool=2
Tp614_DQ831146	46	260 AMPL3931706	Pool=1
Tp614_DQ831146	248	469 AMPL3931707	Pool=2
Tp614_DQ831146	458	687 AMPL3931708	Pool=1
Tp614_DQ831146	678	856 AMPL3931709	Pool=2
Tp614_DQ831146	845	1071 AMPL3931710	Pool=1
Tp614_DQ831146	1060	1254 AMPL3931711	Pool=2
VanB_1_AF192329	59	255 AMPL3931269	Pool=1
VanB_1_AF192329	244	382 AMPL3931270	Pool=2
VanB_1_AF192329	371	574 AMPL3931271	Pool=1
VanB_1_AF192329	563	786 AMPL3931272	Pool=2
VanB_1_AF192329	775	986 AMPL3931273	Pool=1

VanC_3_EU151752	44	268 AMPL3931278	Pool=2
VanC_3_EU151752	257	478 AMPL3931279	Pool=1
VanC_3_EU151752	467	589 AMPL3931280	Pool=2
VanC_3_EU151752	578	802 AMPL3931281	Pool=1
VanC_3_EU151752	791	1005 AMPL3931282	Pool=2
VanG_1_AY271782	41	235 AMPL3931283	Pool=1
VanG_1_AY271782	224	411 AMPL3931284	Pool=2
VanG_1_AY271782	400	619 AMPL3931285	Pool=1
VanG_1_AY271782	608	826 AMPL3931286	Pool=2
VanG_1_AY271782	815	980 AMPL3931287	Pool=1
VanHB_1_AF192329	47	273 AMPL3931288	Pool=1
VanHB_1_AF192329	262	437 AMPL3931289	Pool=2
VanHB_1_AF192329	420	630 AMPL3931290	Pool=1
VanHB_1_AF192329	608	810 AMPL3931291	Pool=2
VanHB_1_AF192329	799	924 AMPL3931292	Pool=1
VanHD_1_AB242319	38	238 AMPL3931293	Pool=2
VanHD_1_AB242319	227	365 AMPL3931294	Pool=1
VanHD_1_AB242319	354	568 AMPL3931295	Pool=2
VanHD_1_AB242319	557	700 AMPL3931296	Pool=1
VanHD_1_AB242319	689	907 AMPL3931297	Pool=2
VanM_AF288163	50	241 AMPL3932015	Pool=1
VanM_AF288163	230	417 AMPL3932016	Pool=2
VanM_AF288163	406	583 AMPL3932017	Pool=1
VanM_AF288163	572	794 AMPL3932018	Pool=2
VanM_AF288163	783	1000 AMPL3932019	Pool=1
VanM_AF288163	989	1158 AMPL3932020	Pool=2

VanRA_1_FJ866609	45	257 AMPL3931298	Pool=1
VanRA_1_FJ866609	246	416 AMPL3931299	Pool=2
VanRA_1_FJ866609	405	625 AMPL3931300	Pool=1
VanRB_1_AF192329	26	249 AMPL3931301	Pool=1
VanRB_1_AF192329	238	449 AMPL3931302	Pool=2
VanRB_1_AF192329	438	604 AMPL3931303	Pool=1
VanRC_1_AF162694	44	251 AMPL3931304	Pool=2
VanRC_1_AF162694	240	406 AMPL3931305	Pool=1
VanRC_1_AF162694	395	624 AMPL3931306	Pool=2
VanRD_1_AB242319	38	208 AMPL3931310	Pool=1
VanRD_1_AB242319	197	423 AMPL3931311	Pool=2
VanRD_1_AB242319	412	627 AMPL3931312	Pool=1
VanSA_M97297	53	177 AMPL3932009	Pool=2
VanSA_M97297	166	300 AMPL3932010	Pool=1
VanSA_M97297	289	507 AMPL3932011	Pool=2
VanSA_M97297	496	721 AMPL3932012	Pool=1
VanSA_M97297	710	932 AMPL3932013	Pool=2
VanSA_M97297	921	1100 AMPL3932014	Pool=1
VanSB_1_AF192329	30	242 AMPL3931313	Pool=2
VanSB_1_AF192329	231	414 AMPL3931314	Pool=1
VanSB_1_AF192329	403	605 AMPL3931315	Pool=2
VanSB_1_AF192329	594	761 AMPL3931316	Pool=1
VanSB_1_AF192329	750	966 AMPL3931317	Pool=2
VanSB_1_AF192329	955	1122 AMPL3931318	Pool=1
VanSB_1_AF192329	1111	1297 AMPL3931319	Pool=2
VanTC_1_AF162694	70	274 AMPL3931329	Pool=1

VanTC_1_AF162694	263	486 AMPL3931330	Pool=2
VanTC_1_AF162694	475	628 AMPL3931331	Pool=1
VanTC_1_AF162694	617	838 AMPL3931332	Pool=2
VanTC_1_AF162694	827	1052 AMPL3931333	Pool=1
VanTC_1_AF162694	1041	1238 AMPL3931334	Pool=2
VanTC_1_AF162694	1227	1416 AMPL3931335	Pool=1
VanTC_1_AF162694	1405	1624 AMPL3931336	Pool=2
VanTC_1_AF162694	1613	1831 AMPL3931337	Pool=1
VanTC_1_AF162694	1823	2033 AMPL3931338	Pool=2
VanTG_1_AY271782	69	288 AMPL3931350	Pool=1
VanTG_1_AY271782	277	395 AMPL3931351	Pool=2
VanTG_1_AY271782	384	590 AMPL3931352	Pool=1
VanTG_1_AY271782	572	771 AMPL3931353	Pool=2
VanTG_1_AY271782	760	955 AMPL3931354	Pool=1
VanTG_1_AY271782	944	1163 AMPL3931355	Pool=2
VanTG_1_AY271782	1152	1376 AMPL3931356	Pool=1
VanTG_1_AY271782	1365	1565 AMPL3931357	Pool=2
VanTG_1_AY271782	1554	1779 AMPL3931358	Pool=1
VanTG_1_AY271782	1768	1858 AMPL3931359	Pool=2
VanTG_1_AY271782	1847	2069 AMPL3931360	Pool=1
VanWB_1_AF192329	28	169 AMPL3931361	Pool=1
VanWB_1_AF192329	158	378 AMPL3931362	Pool=2
VanWB_1_AF192329	367	559 AMPL3931363	Pool=1
VanWB_1_AF192329	548	759 AMPL3931364	Pool=2
VanWG_1_AY271782	53	271 AMPL3931365	Pool=1
VanWG_1_AY271782	260	446 AMPL3931366	Pool=2

VanWG_1_AY271782	431	597 AMPL3931367	Pool=1
VanWG_1_AY271782	586	779 AMPL3931368	Pool=2
VanXA_1_FJ866609	49	147 AMPL3929264	Pool=1
VanXA_1_FJ866609	136	359 AMPL3931369	Pool=2
VanXA_1_FJ866609	348	540 AMPL3931370	Pool=1
VanXB_1_AF192329	44	214 AMPL3931371	Pool=1
VanXB_1_AF192329	203	355 AMPL3931372	Pool=2
VanXB_1_AF192329	344	539 AMPL3931373	Pool=1
VanXD_1_AB242319	36	257 AMPL3931374	Pool=1
VanXD_1_AB242319	246	414 AMPL3931375	Pool=2
VanXD_1_AB242319	398	539 AMPL3931376	Pool=1
VanYB_1_AF192329	33	199 AMPL3931377	Pool=2
VanYB_1_AF192329	188	372 AMPL3931378	Pool=1
VanYB_1_AF192329	361	588 AMPL3931379	Pool=2
VanYB_1_AF192329	577	749 AMPL3931380	Pool=1
VanYD_1_AB242319	28	194 AMPL3931381	Pool=2
VanYD_1_AB242319	183	408 AMPL3931382	Pool=1
VanYD_1_AB242319	397	582 AMPL3931383	Pool=2
VanYD_1_AB242319	571	788 AMPL3931384	Pool=1
VanYD_1_AB242319	777	1004 AMPL3931385	Pool=2
aac6_II_L12710	67	278 AMPL3931489	Pool=1
aac6_II_L12710	267	492 AMPL3931490	Pool=2
aac6_la_1_M18967	34	103 AMPL3930982	Pool=1
aac6_la_1_M18967	92	286 AMPL3930983	Pool=2
aac6_la_1_M18967	275	490 AMPL3930984	Pool=1
aac6_lb_JN108884	66	291 AMPL3931470	Pool=1

aac6_lb_JN108884	280	501 AMPL3931471	Pool=2
aac6_ly_AF144880	25	223 AMPL3931487	Pool=1
aac6_ly_AF144880	212	368 AMPL3931488	Pool=2
aacA_aphD_GU565967	87	190 AMPL3929480	Pool=1
aacA_aphD_GU565967	179	381 AMPL3931472	Pool=2
aacA_aphD_GU565967	342	421 AMPL3931473	Pool=1
aacA_aphD_GU565967	646	848 AMPL3931475	Pool=2
aacA_aphD_GU565967	656	868 AMPL3931476	Pool=1
aacA_aphD_GU565967	1082	1235 AMPL3931478	Pool=2
aacA_aphD_GU565967	1195	1384 AMPL3931479	Pool=1
aacC1_U04610	59	192 AMPL3931402	Pool=2
aacC1_U04610	181	409 AMPL3931403	Pool=1
aacC1_U04610	398	482 AMPL3929333	Pool=2
aacC2_AY138987	26	188 AMPL3931492	Pool=1
aacC2_AY138987	174	375 AMPL3931493	Pool=2
aacC2_AY138987	309	536 AMPL3931494	Pool=1
aacC2_AY138987	507	617 AMPL3931495	Pool=2
aacC2_AY138987	606	839 AMPL3931496	Pool=1
aac_1_AJ628983	70	286 AMPL3930980	Pool=1
aac_1_AJ628983	275	503 AMPL3931491	Pool=2
aadA1_KR610434	59	283 AMPL3931503	Pool=1
aadA1_KR610434	272	482 AMPL3931504	Pool=2
aadA1_KR610434	471	685 AMPL3931505	Pool=1
aadA1_KR610434	674	759 AMPL3929539	Pool=2
aadA2_2_JQ364967	28	154 AMPL3928543	Pool=1
aadA2_2_JQ364967	143	346 AMPL3930988	Pool=2

aadA2_2_JQ364967	335	498 AMPL3930989	Pool=1
aadA2_2_JQ364967	487	685 AMPL3930990	Pool=2
aadA2_2_JQ364967	674	752 AMPL3928550	Pool=1
aadA5_KT175895	24	194 AMPL3931506	Pool=2
aadA5_KT175895	152	376 AMPL3931507	Pool=1
aadA5_KT175895	365	591 AMPL3931508	Pool=2
aadA5_KT175895	580	743 AMPL3931509	Pool=1
aadA9_1_AJ420072	26	227 AMPL3930991	Pool=2
aadA9_1_AJ420072	216	417 AMPL3930992	Pool=1
aadA9_1_AJ420072	406	559 AMPL3930993	Pool=2
aadA9_1_AJ420072	548	772 AMPL3930994	Pool=1
aadA_MH257908	68	277 AMPL3931497	Pool=1
aadA_MH257908	265	411 AMPL3931498	Pool=2
aadA_MH257908	400	607 AMPL3931499	Pool=1
aadA_MH257908	596	734 AMPL3931500	Pool=2
aadD_1_AF181950	61	270 AMPL3930995	Pool=1
aadD_1_AF181950	259	481 AMPL3930996	Pool=2
aadD_1_AF181950	473	701 AMPL3930997	Pool=1
aadE_AB699882	53	210 AMPL3931510	Pool=2
aadE_AB699882	199	421 AMPL3931511	Pool=1
aadE_AB699882	410	484 AMPL3931512	Pool=2
aadE_AB699882	473	689 AMPL3931513	Pool=1
aadE_AB699882	678	863 AMPL3931514	Pool=2
adeA_KX154813	29	149 AMPL3931515	Pool=1
adeA_KX154813	138	343 AMPL3931516	Pool=2
adeA_KX154813	332	538 AMPL3931517	Pool=1

adeA_KX154813	527	734 AMPL3931518	Pool=2
adeA_KX154813	723	943 AMPL3931519	Pool=1
adeA_KX154813	932	1143 AMPL3931520	Pool=2
aph2_Id_1_AF016483	32	252 AMPL3930998	Pool=1
aph2_Id_1_AF016483	241	317 AMPL3930999	Pool=2
aph2_Id_1_AF016483	306	507 AMPL3931000	Pool=1
aph2_Id_1_AF016483	502	694 AMPL3931001	Pool=2
aph2_Id_1_AF016483	683	844 AMPL3931002	Pool=1
aph6_la_1_AY971801	19	211 AMPL3931003	Pool=1
aph6_la_1_AY971801	140	330 AMPL3931004	Pool=2
aph6_la_1_AY971801	314	497 AMPL3931005	Pool=1
aph6_la_1_AY971801	486	723 AMPL3931006	Pool=2
aph6_la_1_AY971801	719	889 AMPL3931007	Pool=1
aphA1_HM146784	25	204 AMPL3931521	Pool=2
aphA1_HM146784	193	420 AMPL3931522	Pool=1
aphA1_HM146784	409	569 AMPL3931523	Pool=2
aphA1_HM146784	558	772 AMPL3931524	Pool=1
armA_1_AY220558	33	230 AMPL3931011	Pool=2
armA_1_AY220558	189	397 AMPL3931012	Pool=1
armA_1_AY220558	376	573 AMPL3931013	Pool=2
armA_1_AY220558	562	717 AMPL3931014	Pool=1
bacA_D85752	78	286 AMPL3931714	Pool=2
bcrB_KX772240	63	230 AMPL3931880	Pool=1
bcrB_KX772240	219	433 AMPL3931881	Pool=2
bcrB_KX772240	422	645 AMPL3931882	Pool=1
bcrR_KX772240	53	274 AMPL3931712	Pool=1

bcrR_KX772240	263	489 AMPL3931713	Pool=2
bla1_AF367983	57	196 AMPL3930712	Pool=1
bla1_AF367983	185	399 AMPL3930713	Pool=2
bla1_AF367983	388	549 AMPL3930714	Pool=1
bla1_AF367983	515	702 AMPL3930715	Pool=2
bla1_AF367983	691	807 AMPL3930716	Pool=1
bla1_AF367983	796	1016 AMPL3930717	Pool=2
bla1_AF367983	1005	1184 AMPL3930718	Pool=1
bla1_AF367983	1173	1379 AMPL3930719	Pool=2
bla1_AF367983	1368	1580 AMPL3930720	Pool=1
blaACC_1_NG_048588	34	136 AMPL3930453	Pool=2
blaACC_1_NG_048588	125	351 AMPL3931999	Pool=1
blaACC_1_NG_048588	340	568 AMPL3932000	Pool=2
blaACC_1_NG_048588	557	730 AMPL3932001	Pool=1
blaACC_1_NG_048588	719	941 AMPL3932002	Pool=2
blaACC_1_NG_048588	930	1132 AMPL3932003	Pool=1
blaAIM_1_AM998375	425	577 AMPL3930721	Pool=1
blaAIM_1_AM998375	591	823 AMPL3930722	Pool=2
blaAIM_1_AM998375	832	1071 AMPL3930723	Pool=1
blaAIM_1_AM998375	1060	1146 AMPL3930724	Pool=2
blaAIM_1_AM998375	1135	1308 AMPL3930725	Pool=1
blaAIM_1_AM998375	1297	1514 AMPL3930726	Pool=2
blaAIM_1_AM998375	1500	1604 AMPL3930727	Pool=1
blaAIM_1_AM998375	1576	1802 AMPL3930728	Pool=2
blaAIM_1_AM998375	1791	1969 AMPL3930729	Pool=1
blaAIM_1_AM998375	1909	2077 AMPL3930730	Pool=2

blaAIM_1_AM998375	2094	2248 AMPL3930732	Pool=1
blaBIC_GQ260093	23	145 AMPL3930740	Pool=2
blaBIC_GQ260093	134	299 AMPL3930741	Pool=1
blaBIC_GQ260093	288	488 AMPL3930742	Pool=2
blaBIC_GQ260093	477	631 AMPL3930743	Pool=1
blaBIC_GQ260093	706	822 AMPL3928060	Pool=2
blaCMY_1_X92508	23	246 AMPL3931896	Pool=1
blaCMY_1_X92508	203	358 AMPL3931897	Pool=2
blaCMY_1_X92508	336	442 AMPL3931898	Pool=1
blaCMY_1_X92508	461	662 AMPL3931900	Pool=2
blaCMY_1_X92508	650	768 AMPL3931901	Pool=1
blaCMY_1_X92508	751	926 AMPL3931902	Pool=2
blaCMY_1_X92508	915	1122 AMPL3931903	Pool=1
blaCTX_M_1_6_DQ915955	69	276 AMPL3930745	Pool=1
blaCTX_M_1_6_DQ915955	265	416 AMPL3930746	Pool=2
blaCTX_M_1_6_DQ915955	406	628 AMPL3930747	Pool=1
blaCTX_M_1_6_DQ915955	605	820 AMPL3930748	Pool=2
blaCTX_M_9_HM569735	62	291 AMPL3930749	Pool=1
blaCTX_M_9_HM569735	275	479 AMPL3930750	Pool=2
blaCTX_M_9_HM569735	457	673 AMPL3930751	Pool=1
blaCTX_M_9_HM569735	663	887 AMPL3930752	Pool=2
blaCTX_M_9_HM569735	876	1101 AMPL3930753	Pool=1
blaCTX_M_9_HM569735	1090	1313 AMPL3930754	Pool=2
blaCTX_M_9_HM569735	1302	1424 AMPL3928083	Pool=1
blaCTX_M_9_HM569735	1413	1627 AMPL3930755	Pool=2
blaCTX_M_9_HM569735	1621	1846 AMPL3930756	Pool=1

blaCTX_M_9_HM569735	1828	1979 AMPL3930757	Pool=2
blaDHA_1_Y16410	33	184 AMPL3931906	Pool=1
blaDHA_1_Y16410	173	364 AMPL3931907	Pool=2
blaDHA_1_Y16410	319	525 AMPL3931908	Pool=1
blaDHA_1_Y16410	514	733 AMPL3931909	Pool=2
blaDHA_1_Y16410	721	893 AMPL3931910	Pool=1
blaDHA_1_Y16410	882	1060 AMPL3931911	Pool=2
blaGES_1_HQ170511	24	217 AMPL3931912	Pool=1
blaGES_1_HQ170511	206	419 AMPL3931913	Pool=2
blaGES_1_HQ170511	408	538 AMPL3931914	Pool=1
blaGES_1_HQ170511	527	676 AMPL3931915	Pool=2
blaGES_1_HQ170511	665	792 AMPL3930308	Pool=1
blaGIM_1_JF414726	64	285 AMPL3931916	Pool=1
blaGIM_1_JF414726	274	491 AMPL3931917	Pool=2
blaGIM_1_JF414726	480	701 AMPL3931918	Pool=1
blaIMP_1_DQ522237	65	285 AMPL3931919	Pool=2
blaIMP_1_DQ522237	275	495 AMPL3931920	Pool=1
blaIMP_1_DQ522237	487	671 AMPL3931921	Pool=2
blaKPC_1_AF297554	23	205 AMPL3931922	Pool=1
blaKPC_1_AF297554	178	402 AMPL3931923	Pool=2
blaKPC_1_AF297554	393	610 AMPL3931924	Pool=1
blaKPC_1_AF297554	582	715 AMPL3931925	Pool=2
blaKPC_1_AF297554	702	860 AMPL3931926	Pool=1
blaL1_3_EF126059	48	281 AMPL3930758	Pool=1
blaL1_3_EF126059	267	470 AMPL3930759	Pool=2
blaL1_3_EF126059	451	630 AMPL3930760	Pool=1

blaL1_3_EF126059	574	744 AMPL3930761	Pool=2
blaL1_3_EF126059	677	819 AMPL3930762	Pool=1
blaOCH_LT840075	30	253 AMPL3930766	Pool=2
blaOCH_LT840075	242	445 AMPL3930767	Pool=1
blaOCH_LT840075	434	602 AMPL3930768	Pool=2
blaOCH_LT840075	591	751 AMPL3930769	Pool=1
blaOCH_LT840075	740	873 AMPL3930770	Pool=2
blaOCH_LT840075	862	1085 AMPL3930771	Pool=1
blaOKP_NG_049360	25	121 AMPL3928115	Pool=2
blaOKP_NG_049360	107	286 AMPL3930772	Pool=1
blaOKP_NG_049360	257	455 AMPL3930773	Pool=2
blaOKP_NG_049360	444	671 AMPL3930774	Pool=1
blaOKP_NG_049360	636	805 AMPL3930775	Pool=2
blaOXA_10_EU708817	31	215 AMPL3931386	Pool=1
blaOXA_10_EU708817	204	402 AMPL3931387	Pool=2
blaOXA_10_EU708817	391	589 AMPL3931388	Pool=1
blaOXA_10_EU708817	578	742 AMPL3931389	Pool=2
blaOXA_23_FJ959346	23	236 AMPL3930776	Pool=1
blaOXA_23_FJ959346	229	371 AMPL3930777	Pool=2
blaOXA_23_FJ959346	360	526 AMPL3930778	Pool=1
blaOXA_23_FJ959346	515	716 AMPL3930779	Pool=2
blaOXA_23_FJ959346	705	920 AMPL3930780	Pool=1
blaOXA_23_FJ959346	909	1111 AMPL3930781	Pool=2
blaOXA_48_2_AY236073	29	214 AMPL3930782	Pool=1
blaOXA_48_2_AY236073	203	428 AMPL3930783	Pool=2
blaOXA_48_2_AY236073	417	592 AMPL3930784	Pool=1

blaOXA_48_2_AY236073	581	751 AMPL3930785	Pool=2
blaOXA_51_AJ309734	61	170 AMPL3929334	Pool=1
blaOXA_51_AJ309734	159	363 AMPL3931404	Pool=2
blaOXA_51_AJ309734	352	559 AMPL3931405	Pool=1
blaOXA_51_AJ309734	548	754 AMPL3931406	Pool=2
blaOXA_58_1_AY665723	69	196 AMPL3928143	Pool=1
blaOXA_58_1_AY665723	185	381 AMPL3930786	Pool=2
blaOXA_58_1_AY665723	370	580 AMPL3930787	Pool=1
blaOXA_58_1_AY665723	569	779 AMPL3930788	Pool=2
blaOXY_1_Z30177	23	195 AMPL3931927	Pool=1
blaOXY_1_Z30177	180	276 AMPL3931928	Pool=2
blaOXY_1_Z30177	265	477 AMPL3931929	Pool=1
blaOXY_1_Z30177	450	625 AMPL3931930	Pool=2
blaOXY_1_Z30177	644	818 AMPL3931932	Pool=1
blaPAO_1_AY083595	56	275 AMPL3930789	Pool=1
blaPAO_1_AY083595	264	454 AMPL3930790	Pool=2
blaPAO_1_AY083595	442	631 AMPL3930791	Pool=1
blaPAO_1_AY083595	618	780 AMPL3930792	Pool=2
blaPAO_1_AY083595	801	1015 AMPL3930794	Pool=1
blaPAO_1_AY083595	859	1085 AMPL3930795	Pool=2
blaPER_1_GU944725	44	265 AMPL3931933	Pool=1
blaPER_1_GU944725	254	479 AMPL3931934	Pool=2
blaPER_1_GU944725	468	697 AMPL3931935	Pool=1
blaPER_1_GU944725	686	868 AMPL3931936	Pool=2
blaPER_2_X93314	58	273 AMPL3931937	Pool=1
blaPER_2_X93314	260	484 AMPL3931938	Pool=2

blaPER_2_X93314	473	700 AMPL3931939	Pool=1
blaPER_2_X93314	689	898 AMPL3931940	Pool=2
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blaPSE_1_M69058	200	423 AMPL3930798	Pool=2
blaPSE_1_M69058	412	630 AMPL3930799	Pool=1
blaPSE_1_M69058	619	753 AMPL3930800	Pool=2
blaPSE_1_M69058	742	894 AMPL3930801	Pool=1
blaPSE_1_M69058	883	1049 AMPL3930802	Pool=2
blaROB_1_DQ840517	70	292 AMPL3931941	Pool=1
blaROB_1_DQ840517	276	474 AMPL3931942	Pool=2
blaROB_1_DQ840517	463	652 AMPL3931943	Pool=1
blaROB_1_DQ840517	641	859 AMPL3931944	Pool=2
blaSFO_1_AB003148	38	171 AMPL3931390	Pool=1
blaSFO_1_AB003148	160	380 AMPL3931391	Pool=2
blaSFO_1_AB003148	369	578 AMPL3931392	Pool=1
blaSFO_1_AB003148	567	781 AMPL3931393	Pool=2
blaSFO_1_AB003148	770	847 AMPL3929310	Pool=1
blaSHV_1_AF148850	27	205 AMPL3930803	Pool=1
blaSHV_1_AF148850	196	429 AMPL3930804	Pool=2
blaSHV_1_AF148850	391	488 AMPL3930805	Pool=1
blaSHV_1_AF148850	471	676 AMPL3930806	Pool=2
blaSHV_1_AF148850	635	807 AMPL3930807	Pool=1
blaSIM_1_JF731030	51	159 AMPL3931945	Pool=1
blaSIM_1_JF731030	148	376 AMPL3931946	Pool=2
blaSIM_1_JF731030	365	560 AMPL3931947	Pool=1
blaSIM_1_JF731030	549	676 AMPL3931948	Pool=2

blaSPM_1_AY341249	36	213 AMPL3931949	Pool=1
blaSPM_1_AY341249	202	412 AMPL3931950	Pool=2
blaSPM_1_AY341249	401	589 AMPL3931951	Pool=1
blaTEM_1A_4_HM749966	33	182 AMPL3930808	Pool=1
blaTEM_1A_4_HM749966	171	398 AMPL3930809	Pool=2
blaTEM_1A_4_HM749966	387	604 AMPL3930810	Pool=1
blaTEM_1A_4_HM749966	593	791 AMPL3930811	Pool=2
blaTLA_1_AF148067	73	201 AMPL3931952	Pool=1
blaTLA_1_AF148067	190	365 AMPL3931953	Pool=2
blaTLA_1_AF148067	354	528 AMPL3931954	Pool=1
blaTLA_1_AF148067	517	723 AMPL3931955	Pool=2
blaTLA_1_AF148067	712	875 AMPL3931956	Pool=1
blaVEB_1_HM370393	72	164 AMPL3930383	Pool=1
blaVEB_1_HM370393	153	323 AMPL3931959	Pool=2
blaVEB_1_HM370393	312	513 AMPL3931960	Pool=1
blaVEB_1_HM370393	502	687 AMPL3931961	Pool=2
blaVEB_1_HM370393	676	852 AMPL3931962	Pool=1
blaVIM_2_KC907378	47	229 AMPL3931394	Pool=2
blaVIM_2_KC907378	218	444 AMPL3931395	Pool=1
blaVIM_2_KC907378	307	535 AMPL3931396	Pool=2
blaVIM_2_KC907378	524	750 AMPL3931397	Pool=1
blaZ_32_AP004832	68	159 AMPL3928189	Pool=2
blaZ_32_AP004832	148	314 AMPL3930812	Pool=1
blaZ_32_AP004832	298	410 AMPL3930813	Pool=2
blaZ_32_AP004832	531	616 AMPL3928196	Pool=1
carB_HQ616211	104	291 AMPL3931989	Pool=2

carB_HQ616211	280	499 AMPL3931990	Pool=1
carB_HQ616211	488	626 AMPL3931991	Pool=2
carB_HQ616211	615	826 AMPL3931992	Pool=1
carB_HQ616211	815	1005 AMPL3931993	Pool=2
carB_HQ616211	994	1186 AMPL3931994	Pool=1
carB_HQ616211	1175	1338 AMPL3931995	Pool=2
carB_HQ616211	1327	1510 AMPL3931996	Pool=1
catA1_1_V00622	35	244 AMPL3931209	Pool=1
catA1_1_V00622	233	381 AMPL3931210	Pool=2
catA1_1_V00622	370	594 AMPL3931211	Pool=1
catB3_1_AJ009818	44	271 AMPL3931212	Pool=2
catB3_1_AJ009818	260	465 AMPL3931213	Pool=1
catB3_1_AJ009818	454	573 AMPL3928965	Pool=2
catB8_1_AF227506	29	209 AMPL3931214	Pool=1
catB8_1_AF227506	198	406 AMPL3931215	Pool=2
catB8_1_AF227506	395	581 AMPL3931216	Pool=1
ceoA_U97042	32	255 AMPL3931716	Pool=2
ceoA_U97042	218	445 AMPL3931717	Pool=1
ceoA_U97042	434	658 AMPL3931718	Pool=2
ceoA_U97042	647	781 AMPL3931719	Pool=1
ceoA_U97042	761	998 AMPL3931720	Pool=2
ceoA_U97042	987	1198 AMPL3931721	Pool=1
cepA_1_L13472	64	255 AMPL3930815	Pool=2
cepA_1_L13472	244	463 AMPL3930816	Pool=1
cepA_1_L13472	452	661 AMPL3930817	Pool=2
cepA_1_L13472	649	833 AMPL3930818	Pool=1

cfr_1_AM408573	68	173 AMPL3928971	Pool=1
cfr_1_AM408573	162	289 AMPL3931217	Pool=2
cfr_1_AM408573	278	489 AMPL3931218	Pool=1
cfr_1_AM408573	478	599 AMPL3931219	Pool=2
cfr_1_AM408573	576	796 AMPL3931220	Pool=1
cfr_1_AM408573	785	865 AMPL3928979	Pool=2
cmeA_AB894099	55	183 AMPL3931626	Pool=1
cmeA_AB894099	174	368 AMPL3931627	Pool=2
cmeA_AB894099	357	559 AMPL3931628	Pool=1
cmeA_AB894099	544	734 AMPL3931629	Pool=2
cmeA_AB894099	789	886 AMPL3931631	Pool=1
cmeA_AB894099	861	1069 AMPL3931632	Pool=2
cmeB_AB894099	42	173 AMPL3931633	Pool=1
cmeB_AB894099	162	374 AMPL3931634	Pool=2
cmeB_AB894099	363	547 AMPL3931635	Pool=1
cmeB_AB894099	536	700 AMPL3931636	Pool=2
cmeB_AB894099	689	909 AMPL3931637	Pool=1
cmeB_AB894099	898	1114 AMPL3931638	Pool=2
cmeB_AB894099	1103	1291 AMPL3931639	Pool=1
cmeB_AB894099	1280	1494 AMPL3931640	Pool=2
cmeB_AB894099	1483	1703 AMPL3931641	Pool=1
cmeB_AB894099	1692	1887 AMPL3931642	Pool=2
cmeB_AB894099	1876	2069 AMPL3931643	Pool=1
cmeB_AB894099	2058	2273 AMPL3931644	Pool=2
cmeB_AB894099	2257	2399 AMPL3931645	Pool=1
cmeB_AB894099	2388	2600 AMPL3931646	Pool=2

cmeB_AB894099	2592	2807 AMPL3931647	Pool=1
cmeB_AB894099	2796	2942 AMPL3931648	Pool=2
cmeC_AB894099	54	267 AMPL3931652	Pool=1
cmeC_AB894099	263	480 AMPL3931653	Pool=2
cmeC_AB894099	469	668 AMPL3931654	Pool=1
cmeC_AB894099	657	868 AMPL3931655	Pool=2
cmeC_AB894099	857	994 AMPL3931656	Pool=1
cmeC_AB894099	983	1202 AMPL3931657	Pool=2
cmeC_AB894099	1191	1402 AMPL3931658	Pool=1
cmIA1_1_M64556	36	198 AMPL3931221	Pool=1
cmIA1_1_M64556	190	419 AMPL3931222	Pool=2
cmIA1_1_M64556	416	647 AMPL3931223	Pool=1
cmIA1_1_M64556	646	867 AMPL3931224	Pool=2
cmIA1_1_M64556	856	1054 AMPL3931225	Pool=1
cmIA1_1_M64556	1024	1220 AMPL3931226	Pool=2
cmr_U44900	54	196 AMPL3931723	Pool=1
cmr_U44900	185	346 AMPL3931724	Pool=2
cmr_U44900	332	549 AMPL3931725	Pool=1
cmr_U44900	539	754 AMPL3931726	Pool=2
cmr_U44900	743	882 AMPL3931727	Pool=1
cmr_U44900	871	1033 AMPL3931728	Pool=2
cmr_U44900	1022	1199 AMPL3931729	Pool=1
cmx_1_U85507	58	257 AMPL3931227	Pool=1
cmx_1_U85507	234	320 AMPL3931228	Pool=2
cmx_1_U85507	314	514 AMPL3931229	Pool=1
cmx_1_U85507	503	738 AMPL3931230	Pool=2

cmx_1_U85507	678	901 AMPL3931231	Pool=1
cmx_1_U85507	890	1115 AMPL3931232	Pool=2
dfrA1_MH574896	39	201 AMPL3932021	Pool=1
dfrA1_MH574896	190	416 AMPL3932022	Pool=2
dfrA_GU565967	30	131 AMPL3931536	Pool=1
dfrA_GU565967	120	298 AMPL3931537	Pool=2
dfrA_GU565967	287	439 AMPL3931538	Pool=1
dfrK_FN390947	39	260 AMPL3931539	Pool=1
dfrK_FN390947	249	462 AMPL3931540	Pool=2
dfrA12_JN108892	22	236 AMPL3931663	Pool=1
dfrA12_JN108892	223	442 AMPL3931664	Pool=2
ereA_2_AF099140	67	292 AMPL3930830	Pool=1
ereA_2_AF099140	281	508 AMPL3930831	Pool=2
ereA_2_AF099140	497	641 AMPL3930832	Pool=1
ereA_2_AF099140	630	809 AMPL3930833	Pool=2
ereA_2_AF099140	798	1023 AMPL3930834	Pool=1
ereA_2_AF099140	1012	1156 AMPL3930835	Pool=2
ereB_2_X03988	22	226 AMPL3930836	Pool=1
ereB_2_X03988	215	425 AMPL3930837	Pool=2
ereB_2_X03988	414	603 AMPL3930838	Pool=1
ereB_2_X03988	592	814 AMPL3930839	Pool=2
ereB_2_X03988	803	1022 AMPL3930840	Pool=1
ereB_2_X03988	1011	1190 AMPL3930841	Pool=2
erm34_AY234334	54	270 AMPL3931407	Pool=1
erm34_AY234334	259	471 AMPL3931408	Pool=2
erm34_AY234334	460	637 AMPL3931409	Pool=1

erm34_AY234334	626	798 AMPL3931410	Pool=2
erm35_AF319779	54	217 AMPL3931411	Pool=1
erm35_AF319779	206	421 AMPL3931412	Pool=2
erm35_AF319779	411	614 AMPL3931413	Pool=1
erm35_AF319779	531	753 AMPL3931414	Pool=2
erm36_AF462611	60	221 AMPL3931415	Pool=1
erm36_AF462611	196	419 AMPL3931416	Pool=2
erm36_AF462611	375	494 AMPL3931417	Pool=1
erm36_AF462611	483	642 AMPL3931418	Pool=2
erm36_AF462611	628	786 AMPL3931419	Pool=1
erm36_AF462611	775	963 AMPL3931420	Pool=2
erm36_AF462611	952	1118 AMPL3931421	Pool=1
ermA_1_X03216	34	161 AMPL3930842	Pool=1
ermA_1_X03216	150	372 AMPL3930843	Pool=2
ermA_1_X03216	361	437 AMPL3928258	Pool=1
ermA_1_X03216	426	642 AMPL3930844	Pool=2
ermB_18_X66468	29	139 AMPL3928264	Pool=1
ermB_18_X66468	128	316 AMPL3930847	Pool=2
ermB_18_X66468	305	500 AMPL3930848	Pool=1
ermB_18_X66468	489	692 AMPL3930849	Pool=2
ermC_1_V01278	31	207 AMPL3930850	Pool=1
ermC_1_V01278	196	408 AMPL3930851	Pool=2
ermC_1_V01278	397	497 AMPL3930852	Pool=1
ermC_1_V01278	494	681 AMPL3930853	Pool=2
ermD_1_M29832	69	250 AMPL3930854	Pool=1
ermD_1_M29832	239	380 AMPL3930855	Pool=2

ermD_1_M29832	388	601 AMPL3930856	Pool=1
ermD_1_M29832	623	795 AMPL3930858	Pool=2
ermE_1_X51891	20	250 AMPL3930861	Pool=1
ermE_1_X51891	236	324 AMPL3928291	Pool=2
ermE_1_X51891	312	546 AMPL3930862	Pool=1
ermE_1_X51891	538	714 AMPL3930863	Pool=2
ermE_1_X51891	700	850 AMPL3930864	Pool=1
ermE_1_X51891	839	1025 AMPL3930865	Pool=2
ermF_2_M17124	54	262 AMPL3930985	Pool=1
ermF_2_M17124	251	465 AMPL3930986	Pool=2
ermF_2_M17124	454	673 AMPL3930987	Pool=1
ermF_2_M17124	665	753 AMPL3928542	Pool=2
ermG_1_M15332	117	296 AMPL3930867	Pool=1
ermG_1_M15332	285	483 AMPL3930868	Pool=2
ermG_1_M15332	472	670 AMPL3930869	Pool=1
ermK_M77505	69	179 AMPL3929320	Pool=1
ermK_M77505	168	380 AMPL3931398	Pool=2
ermK_M77505	373	596 AMPL3931399	Pool=1
ermK_M77505	619	813 AMPL3931401	Pool=2
ermT_1_M64090	50	205 AMPL3930871	Pool=1
ermT_1_M64090	195	376 AMPL3930872	Pool=2
ermT_1_M64090	365	531 AMPL3930873	Pool=1
ermT_1_M64090	520	672 AMPL3930874	Pool=2
ermX_1_M36726	44	207 AMPL3930875	Pool=1
ermX_1_M36726	196	369 AMPL3930876	Pool=2
ermX_1_M36726	348	550 AMPL3930877	Pool=1

ermX_1_M36726	468	670 AMPL3930878	Pool=2
ermX_1_M36726	661	790 AMPL3928327	Pool=1
ermY_1_AB014481	125	317 AMPL3930879	Pool=1
ermY_1_AB014481	300	469 AMPL3930880	Pool=2
ermY_1_AB014481	453	662 AMPL3930881	Pool=1
fabK_FJ390165	27	179 AMPL3931730	Pool=1
fabK_FJ390165	168	391 AMPL3931731	Pool=2
fexA_1_AJ549214	73	155 AMPL3931233	Pool=1
fexA_1_AJ549214	144	366 AMPL3931234	Pool=2
fexA_1_AJ549214	355	550 AMPL3931235	Pool=1
fexA_1_AJ549214	539	764 AMPL3931236	Pool=2
fexA_1_AJ549214	753	974 AMPL3931237	Pool=1
fexA_1_AJ549214	963	1183 AMPL3931238	Pool=2
fexA_1_AJ549214	1172	1377 AMPL3931239	Pool=1
floR_1_AF071555	66	194 AMPL3931241	Pool=2
floR_1_AF071555	183	410 AMPL3931242	Pool=1
floR_1_AF071555	332	544 AMPL3931243	Pool=2
floR_1_AF071555	533	638 AMPL3931244	Pool=1
floR_1_AF071555	627	797 AMPL3931245	Pool=2
floR_1_AF071555	786	956 AMPL3931246	Pool=1
floR_1_AF071555	945	1054 AMPL3931247	Pool=2
floR_1_AF071555	1043	1195 AMPL3931248	Pool=1
folA_EU871432	61	271 AMPL3931665	Pool=1
folA_EU871432	260	451 AMPL3931666	Pool=2
fosA3_KX245440	23	179 AMPL3931541	Pool=1
fosA3_KX245440	164	351 AMPL3931542	Pool=2

fosA_M85195	22	225 AMPL3931544	Pool=1
fosA_M85195	212	398 AMPL3931545	Pool=2
fosB_X89875	103	242 AMPL3931546	Pool=1
fosB_X89875	232	374 AMPL3931547	Pool=2
fosX_CC_KC876749	33	153 AMPL3931551	Pool=1
fosX_CC_KC876749	142	346 AMPL3931552	Pool=2
fosX_CC_KC876749	321	395 AMPL3931553	Pool=1
fosX_NG_047899	57	281 AMPL3931550	Pool=2
gyrA_MG995190	59	268 AMPL3931576	Pool=1
gyrA_MG995190	254	444 AMPL3931577	Pool=2
gyrA_MG995190	433	574 AMPL3931578	Pool=1
gyrA_MG995190	565	763 AMPL3931579	Pool=2
gyrA_MG995190	740	930 AMPL3931580	Pool=1
gyrA_MG995190	919	1102 AMPL3931581	Pool=2
gyrA_MG995190	1093	1300 AMPL3931582	Pool=1
gyrA_MG995190	1289	1389 AMPL3931583	Pool=2
gyrA_MG995190	1377	1584 AMPL3931584	Pool=1
gyrA_MG995190	1573	1703 AMPL3929684	Pool=2
gyrA_MG995190	1700	1915 AMPL3931585	Pool=1
gyrA_MG995190	1904	2106 AMPL3931586	Pool=2
gyrA_MG995190	2126	2293 AMPL3931588	Pool=1
gyrA_MG995190	2267	2469 AMPL3931589	Pool=2
imiR_KR057494	25	139 AMPL3931732	Pool=1
imiR_KR057494	128	329 AMPL3931733	Pool=2
imiR_KR057494	318	548 AMPL3931734	Pool=1
imiR_KR057494	537	676 AMPL3931735	Pool=2

imiR_KR057494	665	837 AMPL3931736	Pool=1
intl1_NZ_CP039294	53	217 AMPL3932033	Pool=1
intl1_NZ_CP039294	199	300 AMPL3930518	Pool=2
intl1_NZ_CP039294	275	468 AMPL3932034	Pool=1
intl1_NZ_CP039294	458	686 AMPL3932035	Pool=2
intl1_NZ_CP039294	551	779 AMPL3932036	Pool=1
intl1_NZ_CP039294	768	965 AMPL3932037	Pool=2
lmrA_1_X59926	34	211 AMPL3930886	Pool=1
lmrA_1_X59926	201	351 AMPL3930887	Pool=2
lmrA_1_X59926	442	552 AMPL3930889	Pool=1
lmrA_1_X59926	542	688 AMPL3930890	Pool=2
lmrA_1_X59926	617	826 AMPL3930891	Pool=1
lmrA_1_X59926	908	1143 AMPL3930893	Pool=2
lmrA_1_X59926	1132	1338 AMPL3930894	Pool=1
lnuA_1_M14039	86	243 AMPL3930898	Pool=1
lnuA_1_M14039	232	424 AMPL3930899	Pool=2
lnuB_1_AJ238249	51	213 AMPL3930902	Pool=1
lnuB_1_AJ238249	202	344 AMPL3930903	Pool=2
lnuB_1_AJ238249	333	543 AMPL3930904	Pool=1
lnuB_1_AJ238249	532	740 AMPL3930905	Pool=2
lnuC_1_AY928180	43	259 AMPL3930906	Pool=1
lnuC_1_AY928180	248	425 AMPL3930907	Pool=2
lsaB_NG_047933	54	121 AMPL3929441	Pool=1
lsaB_NG_047933	108	301 AMPL3931455	Pool=2
lsaB_NG_047933	290	503 AMPL3931456	Pool=1
lsaB_NG_047933	491	709 AMPL3931457	Pool=2

IsaB_NG_047933	698	914 AMPL3931458	Pool=1
IsaB_NG_047933	903	1061 AMPL3931459	Pool=2
IsaB_NG_047933	1050	1222 AMPL3931460	Pool=1
IsaB_NG_047933	1211	1409 AMPL3931461	Pool=2
IsaE_JX560992	48	200 AMPL3931462	Pool=1
IsaE_JX560992	189	407 AMPL3931463	Pool=2
IsaE_JX560992	396	616 AMPL3931464	Pool=1
IsaE_JX560992	605	824 AMPL3931465	Pool=2
IsaE_JX560992	813	1028 AMPL3931466	Pool=1
IsaE_JX560992	1018	1233 AMPL3931467	Pool=2
IsaE_JX560992	1110	1285 AMPL3931468	Pool=1
mcr_1_11_1_KY853650	23	221 AMPL3931133	Pool=1
mcr_1_11_1_KY853650	210	375 AMPL3931134	Pool=2
mcr_1_11_1_KY853650	364	574 AMPL3931135	Pool=1
mcr_1_11_1_KY853650	563	783 AMPL3931136	Pool=2
mcr_1_11_1_KY853650	772	926 AMPL3931137	Pool=1
mcr_1_11_1_KY853650	915	1141 AMPL3931138	Pool=2
mcr_1_11_1_KY853650	1130	1357 AMPL3931139	Pool=1
mcr_1_11_1_KY853650	1346	1561 AMPL3931140	Pool=2
mcr_2_1_1_LT598652	26	171 AMPL3931141	Pool=1
mcr_2_1_1_LT598652	160	369 AMPL3931142	Pool=2
mcr_2_1_1_LT598652	361	579 AMPL3931143	Pool=1
mcr_2_1_1_LT598652	568	789 AMPL3931144	Pool=2
mcr_2_1_1_LT598652	769	953 AMPL3931145	Pool=1
mcr_2_1_1_LT598652	942	1129 AMPL3931146	Pool=2
mcr_2_1_1_LT598652	1118	1337 AMPL3931147	Pool=1

mcr_2_1_1_LT598652	1326	1549 AMPL3931148	Pool=2
mcr_3_17_1_MH332767	64	241 AMPL3931157	Pool=1
mcr_3_17_1_MH332767	230	451 AMPL3931158	Pool=2
mcr_3_17_1_MH332767	440	602 AMPL3931159	Pool=1
mcr_3_17_1_MH332767	595	805 AMPL3931160	Pool=2
mcr_3_17_1_MH332767	794	1015 AMPL3931161	Pool=1
mcr_3_17_1_MH332767	1004	1226 AMPL3931162	Pool=2
mcr_3_17_1_MH332767	1215	1429 AMPL3931163	Pool=1
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mcr_3_1_1_KY924928	50	220 AMPL3931149	Pool=1
mcr_3_1_1_KY924928	205	417 AMPL3931150	Pool=2
mcr_3_1_1_KY924928	406	598 AMPL3931151	Pool=1
mcr_3_1_1_KY924928	587	807 AMPL3931152	Pool=2
mcr_3_1_1_KY924928	796	1012 AMPL3931153	Pool=1
mcr_3_1_1_KY924928	1001	1223 AMPL3931154	Pool=2
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mcr_3_1_1_KY924928	1356	1560 AMPL3931156	Pool=2
mcr_4_1_1_MF543359	42	226 AMPL3931165	Pool=1
mcr_4_1_1_MF543359	215	405 AMPL3931166	Pool=2
mcr_4_1_1_MF543359	394	584 AMPL3931167	Pool=1
mcr_4_1_1_MF543359	573	794 AMPL3931168	Pool=2
mcr_4_1_1_MF543359	783	998 AMPL3931169	Pool=1
mcr_4_1_1_MF543359	987	1207 AMPL3931170	Pool=2
mcr_4_1_1_MF543359	1196	1350 AMPL3931171	Pool=1
mcr_4_1_1_MF543359	1339	1556 AMPL3931172	Pool=2
mcr_5_1_1_KY807921	63	280 AMPL3931173	Pool=1

mcr_5_1_1_KY807921	269	426 AMPL3931174	Pool=2
mcr_5_1_1_KY807921	415	614 AMPL3931175	Pool=1
mcr_5_1_1_KY807921	603	814 AMPL3931176	Pool=2
mcr_5_1_1_KY807921	845	980 AMPL3931178	Pool=1
mcr_5_1_1_KY807921	969	1106 AMPL3931179	Pool=2
mcr_5_1_1_KY807921	1095	1285 AMPL3931180	Pool=1
mcr_5_1_1_KY807921	1274	1476 AMPL3931181	Pool=2
mcr_5_1_1_KY807921	1465	1609 AMPL3931182	Pool=1
mcr_6_1_1_MF176240	22	211 AMPL3931183	Pool=1
mcr_6_1_1_MF176240	200	424 AMPL3931184	Pool=2
mcr_6_1_1_MF176240	413	639 AMPL3931185	Pool=1
mcr_6_1_1_MF176240	628	851 AMPL3931186	Pool=2
mcr_6_1_1_MF176240	837	1019 AMPL3931187	Pool=1
mcr_6_1_1_MF176240	1008	1149 AMPL3931188	Pool=2
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mcr_6_1_1_MF176240	1327	1550 AMPL3931190	Pool=2
mcr_7_1_1_MG267386	55	283 AMPL3931191	Pool=1
mcr_7_1_1_MG267386	272	498 AMPL3931192	Pool=2
mcr_7_1_1_MG267386	437	568 AMPL3931193	Pool=1
mcr_7_1_1_MG267386	697	783 AMPL3928928	Pool=2
mcr_7_1_1_MG267386	759	931 AMPL3931195	Pool=1
mcr_7_1_1_MG267386	883	1051 AMPL3931196	Pool=2
mcr_7_1_1_MG267386	1040	1256 AMPL3931197	Pool=1
mcr_7_1_1_MG267386	1245	1324 AMPL3931198	Pool=2
mcr_7_1_1_MG267386	1307	1501 AMPL3931199	Pool=1
mcr_8_1_MG736312	42	220 AMPL3931201	Pool=1

mcr_8_1_MG736312	209	420 AMPL3931202	Pool=2
mcr_8_1_MG736312	409	627 AMPL3931203	Pool=1
mcr_8_1_MG736312	616	842 AMPL3931204	Pool=2
mcr_8_1_MG736312	831	1046 AMPL3931205	Pool=1
mcr_8_1_MG736312	1028	1231 AMPL3931206	Pool=2
mcr_8_1_MG736312	1220	1435 AMPL3931207	Pool=1
mcr_8_1_MG736312	1424	1633 AMPL3931208	Pool=2
mdet11_AJ012115	49	146 AMPL3929969	Pool=1
mdet11_AJ012115	135	307 AMPL3931737	Pool=2
mdet11_AJ012115	296	372 AMPL3931738	Pool=1
mdet11_AJ012115	361	579 AMPL3931739	Pool=2
mdet11_AJ012115	568	766 AMPL3931740	Pool=1
mdet11_AJ012115	755	959 AMPL3931741	Pool=2
mdet11_AJ012115	948	1128 AMPL3931742	Pool=1
mdtE_NC_000913	42	263 AMPL3931743	Pool=1
mdtE_NC_000913	254	477 AMPL3931744	Pool=2
mdtE_NC_000913	461	685 AMPL3931745	Pool=1
mdtE_NC_000913	674	893 AMPL3931746	Pool=2
mdtE_NC_000913	882	1111 AMPL3931747	Pool=1
mecA_10_AB512767	60	221 AMPL3930819	Pool=1
mecA_10_AB512767	209	354 AMPL3930820	Pool=2
mecA_10_AB512767	343	554 AMPL3930821	Pool=1
mecA_10_AB512767	543	759 AMPL3930822	Pool=2
mecA_10_AB512767	748	860 AMPL3930823	Pool=1
mecA_10_AB512767	849	1064 AMPL3930824	Pool=2
mecA_10_AB512767	1053	1269 AMPL3930825	Pool=1

mecA_10_AB512767	1257	1453 AMPL3930826	Pool=2
mecA_10_AB512767	1442	1610 AMPL3930827	Pool=1
mecA_10_AB512767	1599	1812 AMPL3930828	Pool=2
mecA_10_AB512767	1801	1953 AMPL3930829	Pool=1
mefA_3_AF227521	66	159 AMPL3930908	Pool=1
mefA_3_AF227521	148	369 AMPL3930909	Pool=2
mefA_3_AF227521	358	551 AMPL3930910	Pool=1
mefA_3_AF227521	540	755 AMPL3930911	Pool=2
mefA_3_AF227521	744	962 AMPL3930912	Pool=1
mefA_3_AF227521	951	1151 AMPL3930913	Pool=2
mefB_1_FJ196385	59	168 AMPL3930914	Pool=1
mefB_1_FJ196385	157	385 AMPL3930915	Pool=2
mefB_1_FJ196385	372	572 AMPL3930916	Pool=1
mefB_1_FJ196385	561	785 AMPL3930917	Pool=2
mefB_1_FJ196385	774	993 AMPL3930918	Pool=1
mefB_1_FJ196385	982	1165 AMPL3930919	Pool=2
mel_KU984333	38	198 AMPL3931569	Pool=1
mel_KU984333	187	410 AMPL3931570	Pool=2
mel_KU984333	399	590 AMPL3931571	Pool=1
mel_KU984333	579	799 AMPL3931572	Pool=2
mel_KU984333	788	1007 AMPL3931573	Pool=1
mel_KU984333	996	1221 AMPL3931574	Pool=2
mel_KU984333	1210	1425 AMPL3931575	Pool=1
mepA_AY661734	52	173 AMPL3931748	Pool=1
mepA_AY661734	162	335 AMPL3931749	Pool=2
mepA_AY661734	324	501 AMPL3931750	Pool=1

mepA_AY661734	488	710 AMPL3931751	Pool=2
mepA_AY661734	696	908 AMPL3931752	Pool=1
mepA_AY661734	897	1105 AMPL3931753	Pool=2
mepA_AY661734	1093	1305 AMPL3931754	Pool=1
mphA_1_D16251	53	182 AMPL3928402	Pool=1
mphA_1_D16251	171	325 AMPL3930920	Pool=2
mphA_1_D16251	314	538 AMPL3930921	Pool=1
mphA_1_D16251	468	679 AMPL3930922	Pool=2
mphA_1_D16251	635	861 AMPL3930923	Pool=1
mphB_1_D85892	69	220 AMPL3930924	Pool=2
mphB_1_D85892	209	431 AMPL3930925	Pool=1
mphB_1_D85892	420	627 AMPL3930926	Pool=2
mphB_1_D85892	616	839 AMPL3930927	Pool=1
mphC_1_AB013298	60	157 AMPL3930928	Pool=2
mphC_1_AB013298	146	365 AMPL3930929	Pool=1
mphC_1_AB013298	354	544 AMPL3930930	Pool=2
mphC_1_AB013298	533	628 AMPL3928424	Pool=1
mphC_1_AB013298	617	830 AMPL3930931	Pool=2
msrA_1_X52085	67	196 AMPL3930932	Pool=1
msrA_1_X52085	185	292 AMPL3930933	Pool=2
msrA_1_X52085	281	502 AMPL3930934	Pool=1
msrA_1_X52085	491	714 AMPL3930935	Pool=2
msrA_1_X52085	703	927 AMPL3930936	Pool=1
msrA_1_X52085	920	1070 AMPL3930937	Pool=2
msrA_1_X52085	1059	1275 AMPL3930938	Pool=1
msrA_1_X52085	1264	1423 AMPL3930939	Pool=2

mstrC_1_AY004350	50	193 AMPL3930940	Pool=1
mstrC_1_AY004350	182	403 AMPL3930941	Pool=2
mstrC_1_AY004350	392	594 AMPL3930942	Pool=1
mstrC_1_AY004350	583	803 AMPL3930943	Pool=2
mstrC_1_AY004350	792	1004 AMPL3930944	Pool=1
mstrC_1_AY004350	993	1211 AMPL3930945	Pool=2
mstrC_1_AY004350	1200	1411 AMPL3930946	Pool=1
mstrD_2_AF274302	42	170 AMPL3930947	Pool=1
mstrD_2_AF274302	159	382 AMPL3930948	Pool=2
mstrD_2_AF274302	371	591 AMPL3930949	Pool=1
mstrD_2_AF274302	580	804 AMPL3930950	Pool=2
mstrD_2_AF274302	793	1015 AMPL3930951	Pool=1
mstrD_2_AF274302	1004	1225 AMPL3930952	Pool=2
mstrD_2_AF274302	1214	1394 AMPL3930953	Pool=1
mtrC_HQ712081	30	246 AMPL3931755	Pool=1
mtrC_HQ712081	232	460 AMPL3931756	Pool=2
mtrC_HQ712081	449	670 AMPL3931757	Pool=1
mtrC_HQ712081	658	877 AMPL3931758	Pool=2
mtrC_HQ712081	867	1087 AMPL3931759	Pool=1
mtrC_HQ712081	1076	1266 AMPL3931760	Pool=2
mtrD_HQ706341	18	233 AMPL3931761	Pool=1
nimE_NG_048015	46	274 AMPL3931763	Pool=2
nimE_NG_048015	263	479 AMPL3931764	Pool=1
nisB_X68307	35	169 AMPL3931765	Pool=2
nisB_X68307	157	346 AMPL3931766	Pool=1
nisB_X68307	335	445 AMPL3931767	Pool=2

nisB_X68307	404	616 AMPL3931768	Pool=1
nisB_X68307	605	809 AMPL3931769	Pool=2
nisB_X68307	717	932 AMPL3931770	Pool=1
nisB_X68307	877	1068 AMPL3931771	Pool=2
nisB_X68307	985	1175 AMPL3931772	Pool=1
nisB_X68307	1164	1389 AMPL3931773	Pool=2
nisB_X68307	1378	1569 AMPL3931774	Pool=1
nisB_X68307	1558	1744 AMPL3931775	Pool=2
nisB_X68307	1651	1829 AMPL3931776	Pool=1
nisB_X68307	1797	1955 AMPL3931777	Pool=2
nisB_X68307	1927	2118 AMPL3931778	Pool=1
nisB_X68307	2107	2327 AMPL3931779	Pool=2
nisB_X68307	2316	2479 AMPL3931780	Pool=1
nisB_X68307	2443	2575 AMPL3931781	Pool=2
nisB_X68307	2552	2731 AMPL3931782	Pool=1
nisB_X68307	2652	2867 AMPL3931783	Pool=2
nisB_X68307	2856	2931 AMPL3931784	Pool=1
npmA_1_AB261016	29	197 AMPL3931015	Pool=1
npmA_1_AB261016	186	388 AMPL3931016	Pool=2
npmA_1_AB261016	377	592 AMPL3931017	Pool=1
oleC_1_L06249	30	183 AMPL3930954	Pool=2
oleC_1_L06249	151	274 AMPL3930955	Pool=1
oleC_1_L06249	263	501 AMPL3930956	Pool=2
oleC_1_L06249	470	593 AMPL3930957	Pool=1
oleC_1_L06249	575	801 AMPL3930958	Pool=2
oleC_1_L06249	777	959 AMPL3930959	Pool=1

optrA_NG_048023_1	64	282 AMPL3931966	Pool=1
optrA_NG_048023_1	269	479 AMPL3931967	Pool=2
optrA_NG_048023_1	468	593 AMPL3931968	Pool=1
optrA_NG_048023_1	582	778 AMPL3931969	Pool=2
optrA_NG_048023_1	758	823 AMPL3931970	Pool=1
optrA_NG_048023_1	994	1162 AMPL3931972	Pool=2
oqxA_1_EU370913	66	283 AMPL3931060	Pool=1
oqxA_1_EU370913	272	389 AMPL3931061	Pool=2
oqxA_1_EU370913	403	632 AMPL3931063	Pool=1
oqxA_1_EU370913	529	666 AMPL3931064	Pool=2
oqxA_1_EU370913	823	980 AMPL3931066	Pool=1
oqxA_1_EU370913	969	1121 AMPL3931067	Pool=2
oqxB_1_EU370913	40	231 AMPL3931068	Pool=1
oqxB_1_EU370913	227	446 AMPL3931069	Pool=2
oqxB_1_EU370913	435	571 AMPL3931070	Pool=1
oqxB_1_EU370913	557	725 AMPL3931071	Pool=2
oqxB_1_EU370913	714	899 AMPL3931072	Pool=1
oqxB_1_EU370913	891	1100 AMPL3931073	Pool=2
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oqxB_1_EU370913	1223	1441 AMPL3931075	Pool=2
oqxB_1_EU370913	1417	1601 AMPL3931076	Pool=1
oqxB_1_EU370913	1587	1799 AMPL3931077	Pool=2
oqxB_1_EU370913	1730	1948 AMPL3931078	Pool=1
oqxB_1_EU370913	1910	2022 AMPL3931079	Pool=2
oqxB_1_EU370913	1988	2152 AMPL3931080	Pool=1
oqxB_1_EU370913	2073	2265 AMPL3931081	Pool=2

oqxB_1_EU370913	2253	2388 AMPL3931082	Pool=1
oqxB_1_EU370913	2377	2579 AMPL3931083	Pool=2
oqxB_1_EU370913	2568	2780 AMPL3931084	Pool=1
oqxB_1_EU370913	2747	2941 AMPL3931085	Pool=2
oqxB_1_EU370913	2862	3085 AMPL3931086	Pool=1
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pbp1a_AF446215	128	352 AMPL3931855	Pool=2
pbp1a_AF446215	341	539 AMPL3931856	Pool=1
pbp1a_AF446215	528	731 AMPL3931857	Pool=2
pbp1a_AF446215	720	938 AMPL3931858	Pool=1
pbp1a_AF446215	927	1139 AMPL3931859	Pool=2
pbp1a_AF446215	1128	1349 AMPL3931860	Pool=1
pbp1a_AF446215	1338	1555 AMPL3931861	Pool=2
pbp1a_AF446215	1544	1723 AMPL3931862	Pool=1
pbp2a_AF101780	70	167 AMPL3930257	Pool=1
pbp2a_AF101780	156	377 AMPL3931886	Pool=2
pbp2a_AF101780	366	583 AMPL3931887	Pool=1
pbp2a_AF101780	572	790 AMPL3931888	Pool=2
pbp2a_AF101780	779	965 AMPL3931889	Pool=1
pbp2a_AF101780	954	1181 AMPL3931890	Pool=2
pbp2a_AF101780	1170	1343 AMPL3931891	Pool=1
pbp2a_AF101780	1332	1553 AMPL3931892	Pool=2
pbp2a_AF101780	1542	1747 AMPL3931893	Pool=1
pbp2a_AF101780	1736	1937 AMPL3931894	Pool=2
pbp2a_AF101780	1926	2145 AMPL3931895	Pool=1
pbp3_AJ243120	89	218 AMPL3931863	Pool=2

pbp3_AJ243120	207	403 AMPL3931864	Pool=1
pbp3_AJ243120	392	599 AMPL3931865	Pool=2
pbp3_AJ243120	588	667 AMPL3931866	Pool=1
pbp3_AJ243120	656	874 AMPL3931867	Pool=2
pbp3_AJ243120	863	1054 AMPL3931868	Pool=1
pbp3_AJ243120	1043	1255 AMPL3931869	Pool=2
pbp3_AJ243120	1244	1456 AMPL3931870	Pool=1
pbp3_AJ243120	1445	1667 AMPL3931871	Pool=2
pbp3_AJ243120	1656	1824 AMPL3931872	Pool=1
pbp3_AJ243120	1813	2009 AMPL3931873	Pool=2
pbp5_AF375986	64	260 AMPL3931877	Pool=1
pbp5_AF375986	249	443 AMPL3931878	Pool=2
pbp5_AF375986	432	618 AMPL3931879	Pool=1
pexA_NG_048035	24	171 AMPL3931087	Pool=1
pexA_NG_048035	160	360 AMPL3931088	Pool=2
pexA_NG_048035	349	561 AMPL3931089	Pool=1
pexA_NG_048035	550	752 AMPL3931090	Pool=2
pexA_NG_048035	741	967 AMPL3931091	Pool=1
pexA_NG_048035	956	1183 AMPL3931092	Pool=2
pexA_NG_048035	1172	1397 AMPL3931093	Pool=1
pikR1_AF079138	21	186 AMPL3931556	Pool=2
pikR1_AF079138	179	399 AMPL3931557	Pool=1
pikR1_AF079138	385	605 AMPL3931558	Pool=2
pikR1_AF079138	567	759 AMPL3931559	Pool=1
pikR1_AF079138	748	976 AMPL3931560	Pool=2
pikR2_AF079138	44	229 AMPL3931561	Pool=1

pikR2_AF079138	71	308 AMPL3931562	Pool=2
pikR2_AF079138	266	452 AMPL3931563	Pool=1
pikR2_AF079138	534	768 AMPL3931565	Pool=2
pikR2_AF079138	755	905 AMPL3931566	Pool=1
pncA_KY659393	32	185 AMPL3931785	Pool=1
pncA_KY659393	154	346 AMPL3931786	Pool=2
pncA_KY659393	335	538 AMPL3931787	Pool=1
qacA_NG_061385	74	255 AMPL3931789	Pool=2
qacA_NG_061385	244	448 AMPL3931790	Pool=1
qacA_NG_061385	437	639 AMPL3931791	Pool=2
qacA_NG_061385	628	818 AMPL3931792	Pool=1
qacA_NG_061385	807	935 AMPL3931793	Pool=2
qacA_NG_061385	924	1145 AMPL3931794	Pool=1
qacA_NG_061385	1134	1345 AMPL3931795	Pool=2
qacA_NG_061385	1334	1494 AMPL3931796	Pool=1
qacE_FJ663011	67	285 AMPL3931799	Pool=2
qacH_AY816216	25	200 AMPL3931800	Pool=1
qacH_AY816216	189	273 AMPL3931801	Pool=2
qac_U81980	52	138 AMPL3930070	Pool=1
qac_U81980	127	283 AMPL3931788	Pool=2
qepA_1_AB263754	20	252 AMPL3931094	Pool=1
qepA_1_AB263754	110	282 AMPL3931095	Pool=2
qepA_1_AB263754	432	653 AMPL3931097	Pool=1
qepA_1_AB263754	642	863 AMPL3931098	Pool=2
qepA_1_AB263754	857	1013 AMPL3931099	Pool=1
qepA_1_AB263754	997	1116 AMPL3931100	Pool=2

qepA_1_AB263754	1130	1330 AMPL3931102	Pool=1
qepA_1_AB263754	1319	1488 AMPL3931103	Pool=2
rarD_L02122	52	282 AMPL3931802	Pool=1
rarD_L02122	271	439 AMPL3931803	Pool=2
rarD_L02122	428	657 AMPL3931804	Pool=1
rarD_L02122	646	840 AMPL3931805	Pool=2
rmtA_1_AB120321	40	266 AMPL3931018	Pool=1
rmtA_1_AB120321	229	312 AMPL3931019	Pool=2
rmtA_1_AB120321	482	686 AMPL3931021	Pool=1
rmtB2_1_JN968578	42	251 AMPL3931022	Pool=1
rmtB2_1_JN968578	243	452 AMPL3931023	Pool=2
rmtB2_1_JN968578	447	598 AMPL3931024	Pool=1
rmtB2_1_JN968578	587	686 AMPL3931025	Pool=2
rmtC_1_AB194779	49	226 AMPL3931026	Pool=1
rmtC_1_AB194779	215	420 AMPL3931027	Pool=2
rmtC_1_AB194779	409	611 AMPL3931028	Pool=1
rmtC_1_AB194779	600	776 AMPL3931029	Pool=2
rmtD_1_DQ914960	24	174 AMPL3931030	Pool=1
rmtD_1_DQ914960	102	279 AMPL3931031	Pool=2
rmtD_1_DQ914960	300	452 AMPL3931033	Pool=1
rmtD_1_DQ914960	436	632 AMPL3931034	Pool=2
rmtD_1_DQ914960	601	707 AMPL3931035	Pool=1
rmtE_1_GU201947	30	175 AMPL3931036	Pool=1
rmtE_1_GU201947	164	363 AMPL3931037	Pool=2
rmtE_1_GU201947	352	572 AMPL3931038	Pool=1
rmtE_1_GU201947	564	777 AMPL3931039	Pool=2

rmtG_1_KJ004567	51	267 AMPL3931044	Pool=1
rmtG_1_KJ004567	242	384 AMPL3931045	Pool=2
rmtG_1_KJ004567	373	514 AMPL3931046	Pool=1
rmtG_1_KJ004567	512	725 AMPL3931047	Pool=2
rmtH_1_KC544262	40	181 AMPL3931048	Pool=1
rmtH_1_KC544262	170	316 AMPL3931049	Pool=2
rmtH_1_KC544262	305	530 AMPL3931050	Pool=1
rmtH_1_KC544262	519	689 AMPL3931051	Pool=2
rmtf_1_JQ808129	63	295 AMPL3931040	Pool=1
rmtf_1_JQ808129	239	437 AMPL3931041	Pool=2
rmtf_1_JQ808129	426	536 AMPL3931042	Pool=1
rmtf_1_JQ808129	514	730 AMPL3931043	Pool=2
sat4_AB699882	22	123 AMPL3931554	Pool=1
sat4_AB699882	112	328 AMPL3931555	Pool=2
sat4_AB699882	317	416 AMPL3929630	Pool=1
sdeB_CP033162	32	242 AMPL3931806	Pool=1
sdeB_CP033162	200	400 AMPL3931807	Pool=2
sdeB_CP033162	353	575 AMPL3931808	Pool=1
sdeB_CP033162	564	735 AMPL3931809	Pool=2
sdeB_CP033162	628	857 AMPL3931810	Pool=1
sdeB_CP033162	857	1068 AMPL3931811	Pool=2
sdeB_CP033162	1043	1258 AMPL3931812	Pool=1
sdeB_CP033162	1246	1399 AMPL3931813	Pool=2
sdeB_CP033162	1311	1535 AMPL3931814	Pool=1
sdeB_CP033162	1501	1726 AMPL3931815	Pool=2
sdeB_CP033162	1720	1946 AMPL3931816	Pool=1

sdeB_CP033162	1899	2125 AMPL3931817	Pool=2
sdeB_CP033162	2115	2256 AMPL3931818	Pool=1
sdeB_CP033162	2245	2430 AMPL3931819	Pool=2
sdeB_CP033162	2414	2601 AMPL3931820	Pool=1
sdeB_CP033162	2581	2737 AMPL3931821	Pool=2
sdeB_CP033162	2704	2914 AMPL3931822	Pool=1
sdeB_CP033162	2913	3104 AMPL3931823	Pool=2
spcN_AF170704	25	169 AMPL3932004	Pool=1
spcN_AF170704	160	333 AMPL3932005	Pool=2
spcN_AF170704	629	721 AMPL3932006	Pool=1
spcN_AF170704	710	941 AMPL3932007	Pool=2
speA_KY594413	64	231 AMPL3931883	Pool=1
speA_KY594413	220	435 AMPL3931884	Pool=2
speA_KY594413	416	615 AMPL3931885	Pool=1
strA_1_M96392	44	271 AMPL3931052	Pool=1
strA_1_M96392	256	468 AMPL3931053	Pool=2
strA_1_M96392	457	563 AMPL3928669	Pool=1
strA_1_M96392	552	762 AMPL3931054	Pool=2
strB_EF493834	33	220 AMPL3931055	Pool=1
strB_EF493834	209	334 AMPL3931056	Pool=2
strB_EF493834	323	521 AMPL3931057	Pool=1
strB_EF493834	506	719 AMPL3931058	Pool=2
strB_EF493834	705	852 AMPL3931059	Pool=1
str_X92946	58	212 AMPL3931525	Pool=1
str_X92946	190	394 AMPL3931526	Pool=2
str_X92946	428	577 AMPL3931528	Pool=1

str_X92946	534	713 AMPL3931529	Pool=2
sul1_EF667294	29	219 AMPL3931667	Pool=1
sul1_EF667294	197	364 AMPL3931668	Pool=2
sul1_EF667294	351	571 AMPL3931669	Pool=1
sul1_EF667294	457	660 AMPL3931670	Pool=2
sul1_EF667294	646	791 AMPL3931671	Pool=1
sul2_DQ464881	28	223 AMPL3931672	Pool=2
sul2_DQ464881	204	432 AMPL3931673	Pool=1
sul2_DQ464881	398	616 AMPL3931674	Pool=2
sul2_DQ464881	507	727 AMPL3931675	Pool=1
sulA_KJ831060	29	168 AMPL3932023	Pool=1
sulA_KJ831060	157	367 AMPL3932024	Pool=2
sulA_KJ831060	356	576 AMPL3932025	Pool=1
sulA_KJ831060	565	782 AMPL3932026	Pool=2
sulA_KJ831060	771	902 AMPL3932027	Pool=1
tet32_1_EU722333	59	280 AMPL3930531	Pool=2
tet32_1_EU722333	269	482 AMPL3930532	Pool=1
tet32_1_EU722333	467	657 AMPL3930533	Pool=2
tet32_1_EU722333	646	868 AMPL3930534	Pool=1
tet32_1_EU722333	856	1066 AMPL3930535	Pool=2
tet32_1_EU722333	1052	1278 AMPL3930536	Pool=1
tet32_1_EU722333	1267	1478 AMPL3930537	Pool=2
tet32_1_EU722333	1467	1661 AMPL3930538	Pool=1
tet32_1_EU722333	1650	1872 AMPL3930539	Pool=2
tet34_1_AB061440	44	178 AMPL3930540	Pool=1
tet34_1_AB061440	167	395 AMPL3930541	Pool=2

tet35_1_AF353562	25	218 AMPL3930542	Pool=1
tet35_1_AF353562	207	431 AMPL3930543	Pool=2
tet35_1_AF353562	420	618 AMPL3930544	Pool=1
tet35_1_AF353562	607	832 AMPL3930545	Pool=2
tet35_1_AF353562	821	1040 AMPL3930546	Pool=1
tet36_1_AJ514254	45	254 AMPL3930547	Pool=1
tet36_1_AJ514254	243	450 AMPL3930548	Pool=2
tet36_1_AJ514254	424	601 AMPL3930549	Pool=1
tet36_1_AJ514254	590	769 AMPL3930550	Pool=2
tet36_1_AJ514254	758	942 AMPL3930551	Pool=1
tet36_1_AJ514254	931	1149 AMPL3930552	Pool=2
tet36_1_AJ514254	1138	1265 AMPL3930553	Pool=1
tet36_1_AJ514254	1254	1454 AMPL3930554	Pool=2
tet36_1_AJ514254	1443	1665 AMPL3930555	Pool=1
tet36_1_AJ514254	1654	1854 AMPL3930556	Pool=2
tet37_1_AF540889	54	273 AMPL3930557	Pool=1
tetAP_1_AB054980	66	173 AMPL3927682	Pool=2
tetAP_1_AB054980	162	352 AMPL3930558	Pool=1
tetAP_1_AB054980	341	541 AMPL3930559	Pool=2
tetAP_1_AB054980	503	690 AMPL3930560	Pool=1
tetAP_1_AB054980	720	806 AMPL3927698	Pool=2
tetAP_1_AB054980	795	988 AMPL3930562	Pool=1
tetAP_1_AB054980	1017	1207 AMPL3930564	Pool=2
tetA_2_X00006	39	249 AMPL3930577	Pool=1
tetA_2_X00006	169	401 AMPL3930578	Pool=2
tetA_2_X00006	383	533 AMPL3930579	Pool=1

tetA_2_X00006	524	660 AMPL3930580	Pool=2
tetA_2_X00006	660	869 AMPL3930581	Pool=1
tetA_2_X00006	857	1084 AMPL3930582	Pool=2
tetA_2_X00006	1073	1182 AMPL3927738	Pool=1
tetBP_3_NC_010937	53	260 AMPL3930565	Pool=1
tetBP_3_NC_010937	252	467 AMPL3930566	Pool=2
tetBP_3_NC_010937	433	630 AMPL3930567	Pool=1
tetBP_3_NC_010937	580	735 AMPL3930568	Pool=2
tetBP_3_NC_010937	715	928 AMPL3930569	Pool=1
tetBP_3_NC_010937	958	1049 AMPL3930571	Pool=2
tetBP_3_NC_010937	1025	1184 AMPL3930572	Pool=1
tetBP_3_NC_010937	1173	1327 AMPL3930573	Pool=2
tetBP_3_NC_010937	1316	1471 AMPL3930574	Pool=1
tetBP_3_NC_010937	1460	1655 AMPL3930575	Pool=2
tetBP_3_NC_010937	1644	1842 AMPL3930576	Pool=1
tetBP_3_NC_010937	1831	1927 AMPL3927725	Pool=2
tetB_3_AP000342	27	246 AMPL3930583	Pool=1
tetB_3_AP000342	235	437 AMPL3930584	Pool=2
tetB_3_AP000342	426	554 AMPL3930585	Pool=1
tetB_3_AP000342	543	754 AMPL3930586	Pool=2
tetB_3_AP000342	743	965 AMPL3930587	Pool=1
tetB_3_AP000342	954	1136 AMPL3930588	Pool=2
tetC_2_NC_003123	28	149 AMPL3927750	Pool=1
tetC_2_NC_003123	122	351 AMPL3930589	Pool=2
tetC_2_NC_003123	254	467 AMPL3930590	Pool=1
tetC_2_NC_003123	431	656 AMPL3930591	Pool=2

tetC_2_NC_003123	645	785 AMPL3930592	Pool=1
tetC_2_NC_003123	774	1001 AMPL3930593	Pool=2
tetC_2_NC_003123	990	1127 AMPL3930594	Pool=1
tetD_1_AF467077	70	300 AMPL3930597	Pool=1
tetD_1_AF467077	290	478 AMPL3930598	Pool=2
tetD_1_AF467077	530	678 AMPL3930600	Pool=1
tetD_1_AF467077	647	855 AMPL3930601	Pool=2
tetD_1_AF467077	833	978 AMPL3930602	Pool=1
tetD_1_AF467077	965	1132 AMPL3930603	Pool=2
tetE_3_L06940	32	241 AMPL3930604	Pool=1
tetE_3_L06940	230	390 AMPL3930605	Pool=2
tetE_3_L06940	379	591 AMPL3930606	Pool=1
tetE_3_L06940	580	798 AMPL3930607	Pool=2
tetE_3_L06940	787	954 AMPL3930608	Pool=1
tetE_3_L06940	943	1148 AMPL3930609	Pool=2
tetG_3_S52437	32	144 AMPL3930610	Pool=1
tetG_3_S52437	133	335 AMPL3930611	Pool=2
tetG_3_S52437	299	520 AMPL3930612	Pool=1
tetG_3_S52437	475	687 AMPL3930613	Pool=2
tetG_3_S52437	670	893 AMPL3930614	Pool=1
tetG_3_S52437	882	997 AMPL3927797	Pool=2
tetG_3_S52437	986	1126 AMPL3930615	Pool=1
tetH_1_Y16103	49	275 AMPL3930616	Pool=1
tetH_1_Y16103	264	484 AMPL3930617	Pool=2
tetH_1_Y16103	473	690 AMPL3930618	Pool=1
tetH_1_Y16103	679	894 AMPL3930619	Pool=2

tetH_1_Y16103	883	977 AMPL3927808	Pool=1
tetH_1_Y16103	966	1133 AMPL3930620	Pool=2
tetJ_1_ACLE01000065	47	265 AMPL3930621	Pool=1
tetJ_1_ACLE01000065	254	447 AMPL3930622	Pool=2
tetJ_1_ACLE01000065	435	620 AMPL3930623	Pool=1
tetJ_1_ACLE01000065	606	829 AMPL3930624	Pool=2
tetJ_1_ACLE01000065	818	968 AMPL3930625	Pool=1
tetJ_1_ACLE01000065	957	1129 AMPL3930626	Pool=2
tetK_4_U38428	56	173 AMPL3930627	Pool=1
tetK_4_U38428	162	355 AMPL3930628	Pool=2
tetK_4_U38428	344	549 AMPL3930629	Pool=1
tetK_4_U38428	531	719 AMPL3930630	Pool=2
tetK_4_U38428	774	887 AMPL3930632	Pool=1
tetK_4_U38428	876	1024 AMPL3930633	Pool=2
tetK_4_U38428	942	1151 AMPL3930634	Pool=1
tetK_4_U38428	1149	1348 AMPL3930635	Pool=2
tetL_1_HM235948	37	179 AMPL3930636	Pool=1
tetL_1_HM235948	168	304 AMPL3930637	Pool=2
tetL_1_HM235948	293	511 AMPL3930638	Pool=1
tetL_1_HM235948	500	718 AMPL3930639	Pool=2
tetL_1_HM235948	704	906 AMPL3930640	Pool=1
tetL_1_HM235948	895	1116 AMPL3930641	Pool=2
tetL_1_HM235948	1105	1313 AMPL3930642	Pool=1
tetM_1_X92947	42	125 AMPL3927857	Pool=1
tetM_1_X92947	114	315 AMPL3930643	Pool=2
tetM_1_X92947	304	432 AMPL3930644	Pool=1

tetM_1_X92947	421	616 AMPL3930645	Pool=2
tetM_1_X92947	605	824 AMPL3930646	Pool=1
tetM_1_X92947	813	1011 AMPL3930647	Pool=2
tetM_1_X92947	1000	1072 AMPL3930648	Pool=1
tetM_1_X92947	1061	1280 AMPL3930649	Pool=2
tetM_1_X92947	1269	1453 AMPL3930650	Pool=1
tetM_1_X92947	1442	1659 AMPL3930651	Pool=2
tetM_1_X92947	1648	1865 AMPL3930652	Pool=1
tetO_1_M18896	50	250 AMPL3930653	Pool=1
tetO_1_M18896	239	436 AMPL3930654	Pool=2
tetO_1_M18896	425	607 AMPL3930655	Pool=1
tetO_1_M18896	596	816 AMPL3930656	Pool=2
tetO_1_M18896	808	1020 AMPL3930657	Pool=1
tetO_1_M18896	1009	1206 AMPL3930658	Pool=2
tetO_1_M18896	1195	1401 AMPL3930659	Pool=1
tetO_1_M18896	1390	1595 AMPL3930660	Pool=2
tetO_1_M18896	1584	1660 AMPL3927892	Pool=1
tetO_1_M18896	1649	1871 AMPL3930661	Pool=2
tetQ_3_U73497	22	154 AMPL3930662	Pool=1
tetQ_3_U73497	143	360 AMPL3930663	Pool=2
tetQ_3_U73497	349	571 AMPL3930664	Pool=1
tetQ_3_U73497	560	773 AMPL3930665	Pool=2
tetQ_3_U73497	762	985 AMPL3930666	Pool=1
tetQ_3_U73497	974	1044 AMPL3927905	Pool=2
tetQ_3_U73497	1227	1441 AMPL3930668	Pool=1
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tetQ_3_U73497	1568	1771 AMPL3930670	Pool=1
tetQ_3_U73497	1760	1952 AMPL3930671	Pool=2
tetR_KF697108	31	190 AMPL3930672	Pool=1
tetR_KF697108	179	396 AMPL3930673	Pool=2
tetR_KF697108	385	580 AMPL3930674	Pool=1
tetS_3_X92946	56	129 AMPL3930675	Pool=1
tetS_3_X92946	118	308 AMPL3930676	Pool=2
tetS_3_X92946	297	519 AMPL3930677	Pool=1
tetS_3_X92946	508	715 AMPL3930678	Pool=2
tetS_3_X92946	696	900 AMPL3930679	Pool=1
tetS_3_X92946	876	1078 AMPL3930680	Pool=2
tetS_3_X92946	1067	1190 AMPL3930681	Pool=1
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tetS_3_X92946	1563	1785 AMPL3930684	Pool=2
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tetT_1_L42544	46	123 AMPL3927941	Pool=1
tetT_1_L42544	112	292 AMPL3930685	Pool=2
tetT_1_L42544	281	487 AMPL3930686	Pool=1
tetT_1_L42544	415	586 AMPL3930687	Pool=2
tetT_1_L42544	721	914 AMPL3930689	Pool=1
tetT_1_L42544	903	1116 AMPL3930690	Pool=2
tetT_1_L42544	1105	1322 AMPL3930691	Pool=1
tetT_1_L42544	1311	1480 AMPL3930692	Pool=2
tetT_1_L42544	1469	1685 AMPL3930693	Pool=1
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tetU_1_U01917	57	268 AMPL3930695	Pool=1
tetV_1_AF030344	62	279 AMPL3930696	Pool=1
tetV_1_AF030344	272	508 AMPL3930697	Pool=2
tetV_1_AF030344	491	674 AMPL3930698	Pool=1
tetV_1_AF030344	663	830 AMPL3930699	Pool=2
tetV_1_AF030344	819	930 AMPL3930700	Pool=1
tetV_1_AF030344	911	1100 AMPL3930701	Pool=2
tetV_1_AF030344	1089	1223 AMPL3930702	Pool=1
tetW_1_DQ060146	39	158 AMPL3927986	Pool=2
tetW_1_DQ060146	147	353 AMPL3930703	Pool=1
tetW_1_DQ060146	342	555 AMPL3930704	Pool=2
tetW_1_DQ060146	544	677 AMPL3930705	Pool=1
tetW_1_DQ060146	669	900 AMPL3930706	Pool=2
tetW_1_DQ060146	891	1118 AMPL3930707	Pool=1
tetW_1_DQ060146	1111	1319 AMPL3930708	Pool=2
tetW_1_DQ060146	1305	1504 AMPL3930709	Pool=1
tetW_1_DQ060146	1493	1676 AMPL3930710	Pool=2
tetW_1_DQ060146	1665	1881 AMPL3930711	Pool=1
tetX	507	678 AMPL3931973	Pool=1
tetX	667	840 AMPL3931974	Pool=2
tetX	829	1044 AMPL3931975	Pool=1
tetX3_MK134375	507	696 AMPL3931257	Pool=2
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tetX3_MK134375	883	1110 AMPL3931259	Pool=2
tetX4_MK134376	118	291 AMPL3931249	Pool=1
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tnpA_JX570731	77	220 AMPL3931691	Pool=2
tnpA_JX570731	209	349 AMPL3931692	Pool=1
tnpA_JX570731	294	489 AMPL3931693	Pool=2
tnpA_JX570731	451	613 AMPL3931694	Pool=1
tnpA_JX570731	601	761 AMPL3931695	Pool=2
tnpA_JX570731	1053	1212 AMPL3931696	Pool=1
tnpA_JX570731	1220	1451 AMPL3931697	Pool=2
tolC_FJ768952	46	138 AMPL3930136	Pool=1
tolC_FJ768952	127	302 AMPL3931824	Pool=2
tolC_FJ768952	291	497 AMPL3931825	Pool=1
tolC_FJ768952	486	706 AMPL3931826	Pool=2
tolC_FJ768952	692	914 AMPL3931827	Pool=1
tolC_FJ768952	903	1084 AMPL3931828	Pool=2
tolC_FJ768952	1073	1261 AMPL3931829	Pool=1
tolC_FJ768952	1250	1449 AMPL3931830	Pool=2
ttgA_AF031417	22	232 AMPL3931831	Pool=1
ttgA_AF031417	221	382 AMPL3931832	Pool=2
ttgA_AF031417	371	585 AMPL3931833	Pool=1
ttgA_AF031417	583	735 AMPL3931834	Pool=2
ttgA_AF031417	723	946 AMPL3931835	Pool=1
ttgA_AF031417	941	1130 AMPL3931836	Pool=2
ttgB_AF031417	57	260 AMPL3931837	Pool=1
ttgB_AF031417	249	416 AMPL3931838	Pool=2
ttgB_AF031417	405	572 AMPL3931839	Pool=1
ttgB_AF031417	560	761 AMPL3931840	Pool=2

ttgB_AF031417	750	969 AMPL3931841	Pool=1
ttgB_AF031417	950	1095 AMPL3931842	Pool=2
ttgB_AF031417	1084	1299 AMPL3931843	Pool=1
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ttgB_AF031417	2285	2491 AMPL3931850	Pool=2
ttgB_AF031417	2478	2664 AMPL3931851	Pool=1
ttgB_AF031417	2653	2817 AMPL3931852	Pool=2
ttgB_AF031417	2805	3018 AMPL3931853	Pool=1
ttgB_AF031417	3006	3120 AMPL3930194	Pool=2
vanA_1_FJ866609	59	176 AMPL3931264	Pool=1
vanA_1_FJ866609	165	385 AMPL3931265	Pool=2
vanA_1_FJ866609	374	595 AMPL3931266	Pool=1
vanA_1_FJ866609	584	766 AMPL3931267	Pool=2
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vanRC_4_EU151753	50	224 AMPL3931307	Pool=1
vanRC_4_EU151753	213	435 AMPL3931308	Pool=2
vanRC_4_EU151753	424	641 AMPL3931309	Pool=1
vanSC_1_AF162694	32	200 AMPL3931320	Pool=1
vanSC_1_AF162694	189	408 AMPL3931321	Pool=2
vanSC_1_AF162694	397	586 AMPL3931322	Pool=1
vanSC_1_AF162694	575	801 AMPL3931323	Pool=2

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vanSE_AY700375	33	102 AMPL3929173	Pool=1
vanSE_AY700375	91	306 AMPL3931325	Pool=2
vanSE_AY700375	295	413 AMPL3931326	Pool=1
vanSE_AY700375	402	586 AMPL3931327	Pool=2
vanSE_AY700375	575	786 AMPL3931328	Pool=1
vanTE_FJ872411	57	273 AMPL3931339	Pool=2
vanTE_FJ872411	148	372 AMPL3931340	Pool=1
vanTE_FJ872411	364	507 AMPL3931341	Pool=2
vanTE_FJ872411	493	593 AMPL3929205	Pool=1
vanTE_FJ872411	582	793 AMPL3931342	Pool=2
vanTE_FJ872411	781	965 AMPL3931343	Pool=1
vanTE_FJ872411	956	1174 AMPL3931344	Pool=2
vanTE_FJ872411	1163	1364 AMPL3931345	Pool=1
vanTE_FJ872411	1353	1512 AMPL3931346	Pool=2
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vanTE_FJ872411	1623	1837 AMPL3931348	Pool=2
vanTE_FJ872411	1826	2044 AMPL3931349	Pool=1
vatA_1_L07778	30	253 AMPL3930960	Pool=1
vatA_1_L07778	242	460 AMPL3930961	Pool=2
vatA_1_L07778	449	605 AMPL3930962	Pool=1
vatB_1_U19459	27	234 AMPL3930963	Pool=2
vatB_1_U19459	223	379 AMPL3930964	Pool=1
vatB_1_U19459	368	584 AMPL3930965	Pool=2
vatC_1_AF015628	53	252 AMPL3930966	Pool=1
vatC_1_AF015628	241	378 AMPL3930967	Pool=2

vatC_1_AF015628	367	583 AMPL3930968	Pool=1
vatE_AF242872	24	164 AMPL3932038	Pool=2
vatE_AF242872	153	376 AMPL3932039	Pool=1
vatE_AF242872	365	575 AMPL3932040	Pool=2
vgaA_1_M90056	61	233 AMPL3930969	Pool=1
vgaA_1_M90056	222	421 AMPL3930970	Pool=2
vgaA_1_M90056	404	618 AMPL3930971	Pool=1
vgaA_1_M90056	613	807 AMPL3930972	Pool=2
vgaA_1_M90056	790	987 AMPL3930973	Pool=1
vgaA_1_M90056	979	1200 AMPL3930974	Pool=2
vgaA_1_M90056	1189	1291 AMPL3928513	Pool=1
vgaA_1_M90056	1280	1499 AMPL3930975	Pool=2
vgaA_V_AF186237	69	286 AMPL3931422	Pool=1
vgaA_V_AF186237	275	492 AMPL3931423	Pool=2
vgaA_V_AF186237	481	666 AMPL3931424	Pool=1
vgaA_V_AF186237	655	878 AMPL3931425	Pool=2
vgaA_V_AF186237	867	1089 AMPL3931426	Pool=1
vgaA_V_AF186237	1078	1298 AMPL3931427	Pool=2
vgaA_V_AF186237	1287	1504 AMPL3931428	Pool=1
vgaB_U82085	30	144 AMPL3931429	Pool=1
vgaB_U82085	133	359 AMPL3931430	Pool=2
vgaB_U82085	353	552 AMPL3931431	Pool=1
vgaB_U82085	594	742 AMPL3931433	Pool=2
vgaB_U82085	731	947 AMPL3931434	Pool=1
vgaB_U82085	936	1112 AMPL3931435	Pool=2
vgaB_U82085	1090	1195 AMPL3929397	Pool=1

vgaB_U82085	1184	1378 AMPL3931436	Pool=2
vgaB_U82085	1367	1557 AMPL3931437	Pool=1
vgaC_NG_048559	32	217 AMPL3931439	Pool=1
vgaC_NG_048559	206	419 AMPL3931440	Pool=2
vgaC_NG_048559	408	631 AMPL3931441	Pool=1
vgaC_NG_048559	620	794 AMPL3931442	Pool=2
vgaC_NG_048559	783	953 AMPL3931443	Pool=1
vgaC_NG_048559	942	1115 AMPL3931444	Pool=2
vgaC_NG_048559	1104	1309 AMPL3931445	Pool=1
vgaC_NG_048559	1298	1501 AMPL3931446	Pool=2
vgaE_FR772051	92	306 AMPL3931447	Pool=1
vgaE_FR772051	295	509 AMPL3931448	Pool=2
vgaE_FR772051	498	694 AMPL3931449	Pool=1
vgaE_FR772051	683	889 AMPL3931450	Pool=2
vgaE_FR772051	877	1094 AMPL3931451	Pool=1
vgaE_FR772051	1083	1304 AMPL3931452	Pool=2
vgaE_FR772051	1293	1504 AMPL3931453	Pool=1
vgbB_1_AF015628	42	200 AMPL3930976	Pool=2
vgbB_1_AF015628	189	402 AMPL3930977	Pool=1
vgbB_1_AF015628	391	613 AMPL3930978	Pool=2
vgbB_1_AF015628	602	818 AMPL3930979	Pool=1
