

Table S1: Predicted function of genes shown on Figure 2.

Gene name	length (bp)	%GC content	Predicted functions
<i>ADP-rib</i>	573	28,97	ADP-ribosyltransferase
<i>HP</i>	1032	27,03	hypothetical protein
<i>HP</i>	288	34,72	hypothetical protein
<i>HP</i>	1569	36,71	hypothetical protein
<i>HP</i>	276	32,97	hypothetical protein
<i>recombinase</i>	1347	34,15	casette chrs recombinase A3
<i>recombinase</i>	1629	35,73	casette chrs recombinase B3
<i>HP</i>	351	33,33	hypothetical protein
<i>HP</i>	90	30,00	hypothetical protein
<i>HP</i>	312	32,37	hypothetical protein
<i>HP</i>	522	32,18	hypothetical protein
<i>HP</i>	207	29,95	hypothetical protein
<i>RadC</i>	324	34,26	RadC domain protein
<i>Phage int</i>	1893	33,60	Tphage integrase family protein
<i>Tn554</i>	378	30,16	transposase
<i>cadC</i>	366	33,61	Cadmium resistance transcriptional regulatory protein CadC
<i>cadA</i>	2415	40,54	Cadmium-transporting ATPase
<i>cadD</i>	687	34,79	Cadmium resistance transporter
<i>tauE</i>	630	33,02	sulfite exporter TauE/SafE family protein
<i>cstR</i>	261	24,90	persulfide-sensing transcriptional repressor CstR
<i>dsrE</i>	1065	32,30	dihydroneopterin aldolase
<i>cstB</i>	939	33,12	persulfide dioxygenase-sulfurtransferase CstB
-	261	30,65	rhodanese-like domain-containing protein
<i>roK</i>	1149	28,72	ROK family protein
-	143	30,77	psm_mec_RNA
<i>mecI</i>	204	27,45	Methicillin resistance regulatory protein MecI
<i>mecR1</i>	1542	28,47	beta-lactam sensor/signal transducer MecR1
<i>mecA</i>	2007	30,59	PBP2a beta-lactam-resistant peptidoglycan transpeptidase MecA
<i>maoC</i>	429	29,14	MaoC family dehydratase
<i>ugpQ</i>	744	33,47	Glycerophosphoryl diester phosphodiesterase
<i>HP</i>	231	35,06	hypothetical protein
-	168	29,17	HMG-CoA synthase
<i>IS431mec</i>	675	34,37	IS6 family transposase IS431mec
<i>repN</i>	945	32,17	Replication initiation protein
-	95	33,68	ctRNA_pT181
<i>HP</i>	102	26,47	hypothetical protein
<i>rec3</i>	1242	30,19	plasmid recombination protein
<i>MFS</i>	549	28,96	MFS transporter
<i>tetK</i>	888	28,04	tetracycline efflux MFS transporter Tet(K)
<i>IS6</i>	357	32,49	IS6 family transposase
<i>dnaP</i>	1218	31,61	DNA primase
-	117	34,19	hypothetical protein
<i>ccrC</i>	1680	33,27	Recombinase family protein

-	339	27,73	hypothetical protein
-	90	35,56	hypothetical protein
-	312	33,65	hypothetical protein
-	504	36,11	hypothetical protein
-	222	26,58	hypothetical protein
<i>atpase</i>	1977	27,26	AAA family ATPase
<i>mcrBC</i>	1323	26,68	Putative McrBC 5-methylcytosine restriction system component
<i>hsdR</i>	3120	35,54	Type I restriction endonuclease subunit R
<i>hsdS</i>	1230	26,99	Restriction endonuclease subunit S
<i>hsdM</i>	1515	33,40	Type I restriction-modification system subunit M
<i>cdnS</i>	996	25,70	Cyclic dipyrimidine nucleotide synthase
-	549	28,96	hypothetical protein
-	333	29,43	Membrane protein
<i>lytTR</i>	243	31,28	LytTR family transcriptional regulator
<i>IS431mec</i>	675	34,37	IS6 family transposase IS431mec
-	243	31,28	LytTR family transcriptional regulator
<i>HP</i>	333	29,43	hypothetical protein