

Table S1: gene library used in study

Locus_tag	Gene name	Gene description
P1_gp003	cre	Phage P1 negative control gene
P1_gp013	pro	Phage P1 negative control gene
P1_gp078	dbn	Phage P1 negative control gene
PA14_00010	dnaA	chromosomal replication initiator protein DnaA
PA14_00560	exoT	exoenzyme T
PA14_00640	phzH	phenazine-modifying enzyme
PA14_01160	vgrG	T6SS protein
PA14_01300	coxA	cytochrome c oxidase, subunit I
PA14_01720	ahpF	alkyl hydroperoxide reductase subunit F
PA14_01970	TriC	Triclosan RND efflux transporter
PA14_03650	cysA	sulfate transport protein CysA
PA14_03920	spuD	polyamine transport protein
PA14_04410	ptsP	phosphoenolpyruvate-protein phosphotransferase
PA14_04930	rpoH	RNA polymerase sigma-32 factor
PA14_05310	gshB	glutathione synthetase
PA14_05540	mexB	RND multidrug efflux transporter MexB
PA14_06750	nirS	nitrite reductase precursor
PA14_06830	norB	nitric-oxide reductase subunit B
PA14_06870	dnr	transcriptional regulator Dnr
PA14_07520	rpoD	sigma factor RpoD
PA14_08150	PA14_08150	Pyocin R2 F2 operon
PA14_08370	vfr	cyclic AMP receptor-like protein
PA14_08910	rpsC	30S ribosomal protein S3
PA14_09115	rpoA	DNA-directed RNA polymerase alpha chain
PA14_09150	katA	catalase
PA14_09280	pchF	pyochelin synthetase PchF
PA14_09400	phzS	flavin-containing monooxygenase
PA14_09440	phzE1	phenazine biosynthesis protein PhzE
PA14_09490	phzM	phenazine-specific methyltransferase
PA14_09520	mexI	probable RND efflux transporter
PA14_10500	ccoN4	cytochrome c oxidase subunit (cbb3-type)
PA14_10790	ampC	cephalosporinase

PA14_13780	narG	respiratory nitrate reductase alpha subun
PA14_14680	suhB	extragenic suppressor protein SuhB
PA14_16250	lasB	elastase LasB
PA14_16500	wspR	two-component response regulator
PA14_17290	pyrG	CTP synthase
PA14_17480	rpoS	sigma factor RpoS
PA14_17530	recA	RecA protein
PA14_18580	algD	GDP-mannose 6-dehydrogenase AlgD
PA14_19100	rhIA	rhamnosyltransferase chain A
PA14_19120	rhIR	acylhomoserine lactone dependent transcriptional regulator
PA14_19130	rhII	autoinducer synthesis protein RhII
PA14_20200	nosZ	nitrous-oxide reductase precursor
PA14_22980	glbB	binding protein component of ABC sugar transporter
PA14_23920	purF	amidophosphoribosyltransferase
PA14_24480	pelA	conserved hypothetical protein
PA14_25080	fadB	fatty-acid oxidation complex alpha-subunit
PA14_25560	rne	ribonuclease E
PA14_27480	htpX	heat shock protein HtpX
PA14_30050	aceA	isocitrate lyase
PA14_30630	pqsH	FAD-dependent monooxygenase
PA14_32390	mexF	RND multidrug efflux transporter MexF
PA14_33700	pvdF	pyoverdine synthetase F
PA14_34050	impC	conserved hypothetical protein
PA14_35670	pslG	glycosyl hydrolase
PA14_36310	hcnC	hydrogen cyanide synthase HcnC
PA14_36345	exoY	adenylate cyclase ExoY
PA14_38410	amrB	RND multidrug efflux transporter
PA14_39330	rbsA	ribose ABC transporter, ATP-binding protein
PA14_40290	lasA	staphylolytic protease preproenzyme LasA
PA14_40510	ccoN3	cytochrome c oxidase, cbb3-type, subunit
PA14_41220	lon	Lon protease
PA14_41230	clpX	ATP-dependent Clp protease ATP-binding subunit ClpX
PA14_41440	uspL	universal stress protein
PA14_41510	nasA	nitrate transporter

PA14_41575	sigX	ECF sigma factor SigX
PA14_42350	pscC	Type III secretion outer membrane protein PscC precursor
PA14_42500	pcrD	type III secretory apparatus protein PcrD
PA14_43950	sucC	succinyl-CoA synthetase beta subunit
PA14_44340	ccoN2	cytochrome oxidase subunit (cbb3-type)
PA14_44370	ccoN1	cytochrome oxidase subunit (cbb3-type)
PA14_44490	anr	transcriptional regulator Anr
PA14_45630	fliA	motility sigma factor FliA
PA14_45940	lasI	autoinducer synthesis protein LasI
PA14_45960	lasR	transcriptional regulator LasR
PA14_48060	aprA	alkaline metalloproteinase precursor
PA14_48930	PA14_48930	pf5 phage gene
PA14_49250	napA	periplasmic nitrate reductase protein NapA
PA14_50290	fliC	flagellin type B
PA14_50360	flgK	flagellar hook-associated protein 1 FlgK
PA14_51340	mvfR	Transcriptional regulator MvfR
PA14_51410	pqsC	PqsC
PA14_52180	relA	GTP pyrophosphokinase
PA14_52270	ldhA	D-lactate dehydrogenase (fermentative)
PA14_52580	lysC	aspartate kinase alpha and beta chain
PA14_53470	ackA	probable acetate kinase
PA14_54430	algU	sigma factor AlgU
PA14_56220	uspM	universal stress protein
PA14_56780	sodB	iron superoxide dismutase
PA14_57940	rpoN	RNA polymerase sigma-54 factor
PA14_58000	sodM	superoxide dismutase
PA14_58730	pilA	type IV pilin structural subunit
PA14_60310	pilY1	type 4 fimbrial biogenesis protein PilY1
PA14_61040	katB	catalase
PA14_61060	fnr-2	ferredoxin--NADP+ reductase
PA14_61200	cdrA	conserved hypothetical protein
PA14_62160	ilvI	acetolactate synthase large subunit
PA14_62710	pnp	polyribonucleotide nucleotidyltransferase
PA14_62730	truB	tRNA pseudouridine 55 synthase

PA14_62860	ftsH	cell division protein FtsH
PA14_68330	arcA	Arginine fermentation
PA14_69190	rho	transcription termination factor Rho
PA14_70470	spoT	guanosine-3',5'-bis(diphosphate) 3'-pyrophosphohydrolase
PA14_70560	OxyR	transcriptional regulator, LysR family
PA14_70860	pstS	phosphate ABC transporter, periplasmic phosphate-binding protein
PA14_72960	kgtP	MFS dicarboxylate transporter
PA14_73260	atpA	ATP synthase alpha chain