

Table S9

Burn wound infection cluster												Gene name	Product name
	bw /bf	tu/ bf	pl/ bf	bw/ lb	tu/ lb	pl/ lb	pl/ bw	pl/ tu	tu/ bw	bf /lb			
PA0059	+	+	+	+			-		-	-	<i>osmC</i>	osmotically inducible protein OsmC	
PA0060	+			+			-		-			conserved hypothetical protein	
PA0102	+	+	+	+	+	+	-					probable carbonic anhydrase	
PA0104	+			+								hypothetical protein	
PA0266										+	<i>gabT</i>	4-aminobutyrate aminotransferase	
PA0320	+	+		+	+		-	-				conserved hypothetical protein	
PA0354				+			-					conserved hypothetical protein	
PA0355	+	+					-	-	-	-	<i>pfpI</i>	protease PfpI	
PA0376	+										<i>rpoH</i>	sigma factor RpoH	
PA0423				+			-				<i>pasP</i>	PasP	
PA0532	+			+			-		-			hypothetical protein	
PA0553	+						-	-		-		hypothetical protein	
PA0567	+				-	-	-		-	-		conserved hypothetical protein	
PA0672	+						-		-		<i>hemO</i>	heme oxygenase	
PA0707	+			+			-		-		<i>toxR</i>	transcriptional regulator ToxR	
PA0763	+						-				<i>mucA</i>	anti-sigma factor MucA	
PA0779				+			-					probable ATP-dependent protease	
PA1134	+			+					-			hypothetical protein	
PA1245					-	-					<i>aprX</i>	AprX	
PA1320							-				<i>cyoD</i>	cytochrome o ubiquinol oxidase subunit IV	
PA1323	+	+	+							-		hypothetical protein	
PA1324	+			+			-		-			hypothetical protein	
PA1500							-					probable oxidoreductase	
PA1515	+			+			-				<i>alc</i>	allantoicase	
PA1518	+			+			-		-			conserved hypothetical protein	
PA1579	+								-			hypothetical protein	
PA1596			-	+			-	-			<i>htpG</i>	heat shock protein HtpG	
PA1870	+			+			-		-			hypothetical protein	
PA1925					+			-				hypothetical protein	

PA2000	+		+		-				<i>dhcB</i>	DhcB, dehydrocarnitine CoA transferase, subunit B
PA2033	+									hypothetical protein
PA2034	+				-	-	-			hypothetical protein
PA2108	+			+			-			probable decarboxylase
PA2116				-						conserved hypothetical protein
PA2134	+	+	+	+			-			hypothetical protein
PA2135	+			+			-			probable transporter
PA2140	+			+			-			probable metallothionein
PA2141	+			+			-			hypothetical protein
PA2142	+			+			-			probable short-chain dehydrogenase
PA2143	+	+	+	+			-			hypothetical protein
PA2144	+			+			-			<i>glgP</i>
PA2145	+			+			-			hypothetical protein
PA2146	+	+	+	+		-		+		conserved hypothetical protein
PA2147	+			+			-			<i>katE</i>
PA2148	+			+			-			conserved hypothetical protein
PA2149	+			+		-				hypothetical protein
PA2150	+			+			-			conserved hypothetical protein
PA2151	+			+			-			conserved hypothetical protein
PA2152	+		+	+			-			probable trehalose synthase
PA2153	+			+						<i>glgB</i>
PA2157	+			+			-			hypothetical protein
PA2158	+			+			-			probable alcohol dehydrogenase (Zn-dependent)
PA2159	+		+	+		-	-			conserved hypothetical protein
PA2160	+			+			-			<i>glgX</i>
PA2161	+			+			-			<i>0</i>
PA2164	+			+			-			probable glycosyl hydrolase
PA2165	+			+			-			<i>glgA</i>
PA2167	+			+			-			hypothetical protein
PA2168	+	+		+			-			hypothetical protein
PA2169	+	+	+	+			-			hypothetical protein
PA2170	+	+	+	+			-			hypothetical protein
PA2171	+	+		+			-			hypothetical protein

PA2172	+	+	+	+		-			-	hypothetical protein	
PA2173	+	+	+			-			-	hypothetical protein	
PA2176	+			+		-				hypothetical protein	
PA2178	+			+		-				hypothetical protein	
PA2180	+			+		-		-		hypothetical protein	
PA2181	+			+		-				hypothetical protein	
PA2182	+					-				hypothetical protein	
PA2183	+			+		-				hypothetical protein	
PA2184	+					-				conserved hypothetical protein	
PA2187	+			+		-				hypothetical protein	
PA2189	+					-				hypothetical protein	
PA2190	+	+	+	+		-		-	-	conserved hypothetical protein	
PA2192	+			+		-	-	-		conserved hypothetical protein	
PA2383	+		+	+						probable transcriptional regulator	
PA2384	+		+	+				+	-	hypothetical protein	
PA2385	+			+		-			-	<i>pvdQ</i> 3-oxo-C12-homoserine lactone acylase PvdQ	
PA2386	+			+		-				<i>pvdA</i> L-ornithine N5-oxygenase	
PA2393	+			+		-				probable dipeptidase precursor	
PA2394						-			-	<i>pvdN</i> PvdN	
PA2405	+		+	+		+			-	hypothetical protein	
PA2411	+	+	+	+		+			-	probable thioesterase	
PA2412	+	+	+	+		+		+	-	conserved hypothetical protein	
PA2413	+			+			-		-	<i>pvdH</i> L-2,4-diaminobutyrate:2-ketoglutarate 4-aminotransferase, PvdH	
PA2414	+					-	-	-	-	L-sorbose dehydrogenase	
PA2424	+			+						<i>pvdL</i> PvdL	
PA2485				+						hypothetical protein	
PA2486	+			+		-			-	hypothetical protein	
PA2634				+		-				<i>aceA</i> isocitrate lyase AceA	
PA2694	+			+		-				probable thioredoxin	
PA3041	+	+	+						-	hypothetical protein	
PA3042	+					-	-		-	hypothetical protein	
PA3126			-	+	+		-	-		+	<i>ibpA</i> heat-shock protein IbpA
PA3231	+	+	+			-			-	-	hypothetical protein

PA4467	+			-		+	-	-		hypothetical protein
PA4468	+	+	+	-	-	+	-	-	<i>sodM</i>	superoxide dismutase
PA4469	+			-	-		-	-		hypothetical protein
PA4470	+			-		+	-	-	<i>fumC1</i>	fumarate hydratase
PA4570	+			-		+	-	-		hypothetical protein
PA4661	+				-		-		<i>pagL</i>	Lipid A 3-O-deacylase
PA4738							-			conserved hypothetical protein
PA4739							-			conserved hypothetical protein
PA4761	+	+		+	+		-	-	<i>dnaK</i>	DnaK protein
PA4834	+			+			-	-		hypothetical protein
PA4835	+			+			-	-		hypothetical protein
PA4836	+			+			-	-		hypothetical protein
PA4837	+			+			-	-		probable outer membrane protein precursor
PA4838	+			+			-	-		hypothetical protein
PA4877	+	+					-	-		hypothetical protein
PA4896	+			+			-	-		probable sigma-70 factor, ECF subfamily
PA4936	+								<i>spoU</i>	probable rRNA methylase
PA5053				-	+		-		<i>hslV</i>	heat shock protein HslV
PA5054				-	+	+	-	+	<i>hslU</i>	heat shock protein HslU
PA5060	+						-		<i>phaF</i>	polyhydroxyalkanoate synthesis protein PhaF
PA5150	+		+							probable short-chain dehydrogenase
PA5340				+		+		+		hypothetical protein
PA5388	+	+		+	+		-	-		hypothetical protein
PA5481	+			+			-	-		hypothetical protein
PA5499	+			+			-	-	<i>np20</i>	transcriptional regulator np20
PA5501								+	<i>znuB</i>	permease of ABC zinc transporter ZnuB
PA5534				+			-	-		hypothetical protein
PA5535	+			+			-	-		conserved hypothetical protein
PA5536	+			+			-	-		conserved hypothetical protein
PA5537	+			+			-	-		hypothetical protein
PA5538	+			+			-	-	<i>amiA</i>	N-acetylmuramoyl-L-alanine amidase
PA5539	+			+			-	-		hypothetical protein
PA5540	+			+			-	-		hypothetical protein

PA5541 + + - - *pyrQ* dihydroorotase

Plant infection cluster													
	bw /bf	tu/ bf	pl/ bf	bw/ lb	tu/ lb	pl/ lb	pl/ bw	pl/ tu	tu/ bw	bf/ lb			
PA0011						+	+						probable 2-OH-lauroyltransferase
PA0035			+			+	+						<i>trpA</i> tryptophan synthase alpha chain
PA0036							+						<i>trpB</i> tryptophan synthase beta chain
PA0201			+			+	+						hypothetical protein
PA0226						+							probable CoA transferase, subunit A
PA0276		+	+		+	+	+			+			hypothetical protein
PA0280			+			+	+	+					<i>cysA</i> sulfate transport protein CysA
PA0281			+			+	+	+					<i>cysW</i> sulfate transport protein CysW
PA0282			+			+	+						<i>cysT</i> sulfate transport protein CysT
PA0283			+			+	+	+					<i>sbp</i> sulfate-binding protein precursor
PA0284			+			+	+	+					hypothetical protein
PA0286			+			+	+	+					<i>desA</i> delta-9 fatty acid desaturase, DesA
PA0296								+					<i>spuI</i> probable glutamine synthetase
PA0298			+			+	+	+					<i>spuB</i> probable glutamine synthetase
PA0385	-	-				+	+	+			+		hypothetical protein
PA0386						+							probable oxidase
PA0436						+		+					probable transcriptional regulator
PA0439			+			+	+						probable oxidoreductase
PA0441			+			+	+	+					<i>dht</i> dihydropyrimidinase
PA0444						+	+	+					N-carbamoyl-beta-alanine amidohydrolase
PA0451			+			+	+	+					conserved hypothetical protein
PA0456	-	-	+			+	+	+		-	+		probable cold-shock protein
PA0472	+		+		-	+		+		-	-		<i>fiuI</i> probable sigma-70 factor, ECF subfamily
PA0473							+						<i>psfA</i> probable glutathione S-transferase
PA0485						+	+						conserved hypothetical protein
PA0505		-	+	-	-	+	+	+		-	-		hypothetical protein
PA0547								+					probable transcriptional regulator
PA0608	-					+					+		<i>gph</i> probable phosphoglycolate phosphatase

PA0676										<i>vreR</i>	sigma factor regulator, VreR
PA0730											probable transferase
PA0734		+									hypothetical protein
PA0801		+									hypothetical protein
PA0802		+		-							hypothetical protein
PA0810		+									probable haloacid dehalogenase
PA0814		+									conserved hypothetical protein
PA0815		+									probable transcriptional regulator
PA0817		+									probable ring-cleaving dioxygenase
PA0837		+								<i>slyD</i>	peptidyl-prolyl cis-trans isomerase SlyD
PA0851		+									hypothetical protein
PA0862		+									hypothetical protein
PA0929		-								<i>pirR</i>	two-component response regulator
PA0936		-								<i>lpxO2</i>	lipopolysaccharide biosynthetic protein LpxO2
PA0995		+								<i>ogt</i>	methylated-DNA--protein-cysteine methyltransferase
PA1060		+									hypothetical protein
PA1075		+									hypothetical protein
PA1092		-									
PA1101										<i>fliC</i>	flagellin type B
PA1101										<i>fliF</i>	Flagella M-ring outer membrane protein precursor
PA1190		+		-							conserved hypothetical protein
PA1192											conserved hypothetical protein
PA1296											probable 2-hydroxyacid dehydrogenase
PA1377		+									conserved hypothetical protein
PA1440		+									hypothetical protein
PA1452										<i>flhA</i>	flagellar biosynthesis protein FlhA
PA1505		+								<i>moaA2</i>	molybdopterin biosynthetic protein A2
PA1626		+									probable major facilitator superfamily (MFS) transporter
PA1630		+									probable transcriptional regulator
PA1632										<i>kdpF</i>	KdpF protein
PA1651		+									probable transporter
PA1676		+									hypothetical protein
PA1677		+		-							conserved hypothetical protein
PA1730		+									conserved hypothetical protein

PA1775		+		+	+	-	<i>cmpX</i>	conserved cytoplasmic membrane protein, CmpX protein	
PA1776	-		-		+		<i>sigX</i>	ECF sigma factor SigX	
PA1778		+		+	+	+	<i>cobA</i>	uroporphyrin-III C-methyltransferase	
PA1779		+		+	+			assimilatory nitrate reductase	
PA1780		+		+	+	+	<i>nirD</i>	assimilatory nitrite reductase small subunit	
PA1781		+		+	+		<i>nirB</i>	assimilatory nitrite reductase large subunit	
PA1782				+	+			probable serine/threonine-protein kinase	
PA1783		+		+			<i>nasA</i>	nitrate transporter	
PA1800				+		+	<i>tig</i>	trigger factor	
PA1814		+			+	+		hypothetical protein	
PA1837		+		+	+			hypothetical protein	
PA1838		+		+	+	+	<i>cysI</i>	sulfite reductase	
PA1856		+		+	+	+		probable cytochrome oxidase subunit	
PA1927		+		+	+	+	<i>metE</i>	5-methyltetrahydropteroyltriglutamate-homocysteine S-methyltransferase	
PA1950		+			+		<i>rbsK</i>	ribokinase	
PA1963		+		+	+	+		hypothetical protein	
PA1984		+		+	+	+	+	<i>exaC</i>	NAD ⁺ dependent aldehyde dehydrogenase ExaC
PA1998		+		+			<i>dhcR</i>	DhcR, transcriptional regulator	
PA2019				+	+	+	<i>amrA</i>	Resistance-Nodulation-Cell Division (RND) multidrug efflux membrane fusion protein precursor	
PA2030		+	-	+	+	+	-		hypothetical protein
PA2031	+	+		+	+	+		hypothetical protein	
PA2045		+		+	+	+		conserved hypothetical protein	
PA2092		+		+				probable major facilitator superfamily (MFS) transporter	
PA2229		+		+	+			conserved hypothetical protein	
PA2259		+		+	+	+	<i>ptxS</i>	transcriptional regulator PtxS	
PA2260		+		+	+	+		hypothetical protein	
PA2261		+		+	+			probable 2-ketogluconate kinase	
PA2263		+		+	+	+		probable 2-hydroxyacid dehydrogenase	
PA2306		+		+	+	+	<i>ambA</i>	AmbA	
PA2322		+		+	+			gluconate permease	
PA2380		+		+	+	+		hypothetical protein	
PA2484		+			+	+		conserved hypothetical protein	

PA4147		+			+	+	+			<i>acoR</i>	transcriptional regulator AcoR
PA4176		+			+					<i>ppiC2</i>	peptidyl-prolyl cis-trans isomerase C2
PA4245	-				+			+		<i>rpmD</i>	50S ribosomal protein L30
PA4248	-		+		+		+	+		<i>rplF</i>	50S ribosomal protein L6
PA4262					+			+		<i>rplD</i>	50S ribosomal protein L4
PA4263	-				+			+		<i>rplC</i>	50S ribosomal protein L3
PA4293		+	-				+	+		<i>pprA</i>	two-component sensor PprA
PA4326		+			+	+	+				hypothetical protein
PA4379		+		-			+	-			conserved hypothetical protein
PA4442		+			+	+				<i>cysN</i>	ATP sulfurylase GTP-binding subunit/APS kinase
PA4443		+			+	+	+			<i>cysD</i>	ATP sulfurylase small subunit
PA4544					+					<i>rluD</i>	pseudouridine synthase
PA4567	-	-		-	+	+	+	-	+	<i>rpmA</i>	50S ribosomal protein L27
PA4575	+	+	+			+			-		hypothetical protein
PA4602	-	-			+	+	+		+	<i>glyA3</i>	serine hydroxymethyltransferase
PA4630		+			+	+	+				hypothetical protein
PA4637		+			+	+	+				hypothetical protein
PA4666					+					<i>hemA</i>	glutamyl-tRNA reductase
PA4726		+			+	+	+			<i>cbrB</i>	two-component response regulator CbrB
PA4742					+				+	<i>truB</i>	tRNA pseudouridine 55 synthase
PA4748					+	+			+	<i>tpiA</i>	triosephosphate isomerase
PA4750					+					<i>folP</i>	dihydropteroate synthase
PA4758					+					<i>carA</i>	carbamoyl-phosphate synthase small chain
PA4780		+	-				+	+			conserved hypothetical protein
PA4852					+	+	+				conserved hypothetical protein
PA4859		+			+						probable permease of ABC transporter
PA4870		+			+	+	+				conserved hypothetical protein
PA4881		+	+		+	+	+	+	+		hypothetical protein
PA4933					+	+			+		hypothetical protein
PA4939					+	+	+		+		conserved hypothetical protein
PA4940	-	-		-	+	+	+	-			conserved hypothetical protein
PA5028		+			+	+					conserved hypothetical protein
PA5048		+			+	+	+				probable nuclease

PA0534					-			conserved hypothetical protein	
PA0545		+		+	-		+	hypothetical protein	
PA0572				+	-			hypothetical protein	
PA0713	-	+	-	+	-		+	hypothetical protein	
PA0715					-			hypothetical protein	
PA0716					-			hypothetical protein	
PA0781	+	+		+	+			hypothetical protein	
PA0822					-			hypothetical protein	
PA0835					-		+	<i>pta</i> phosphate acetyltransferase	
PA0836		+		+	-		+	<i>ackA</i> acetate kinase	
PA0864		+		+	-		+	probable transcriptional regulator	
PA0874					-			hypothetical protein	
PA0952	-		-	+	-		+	+	hypothetical protein
PA0962	+	+			-	-			probable dna-binding stress protein
PA0977					-				hypothetical protein
PA0985					-				<i>pyoS5</i> pyocin S5
PA1029	+	+	+	+	-		+		hypothetical protein
PA1126				+	-				hypothetical protein
PA1127		+			-				probable oxidoreductase
PA1131		-			+	+			probable major facilitator superfamily (MFS) transporter
PA1195		+		+	-		+		hypothetical protein
PA1329					-				conserved hypothetical protein
PA1337		+							<i>ansB</i> glutaminase-asparaginase
PA1369					-	-			hypothetical protein
PA1370					-	-			hypothetical protein
PA1371					-	-			hypothetical protein
PA1372					-	-			hypothetical protein
PA1388		+		+	-		+		hypothetical protein
PA1429		+		+	-		+		probable cation-transporting P-type ATPase
PA1555	-		-	+	-	-	+	+	<i>ccoP2</i> Cytochrome c oxidase, cbb3-type, CcoP subunit
PA1557	-		-	+	-	-	+	+	<i>ccoN2</i> Cytochrome c oxidase, cbb3-type, CcoN subunit
PA1664					-	-			hypothetical protein
PA1673		+		+	-	-	+		hypothetical protein

PA1692					<i>pscS</i>	probable translocation protein in type III secretion
PA1696					<i>pscO</i>	translocation protein in type III secretion
PA1699					<i>pcr1</i>	Pcr1
PA1700		+			<i>pcr2</i>	Pcr2
PA1701	-				<i>pcr3</i>	Pcr3
PA1706		+			<i>pcrV</i>	type III secretion protein PcrV
PA1707		+			<i>pcrH</i>	regulatory protein PcrH
PA1708		+			<i>popB</i>	translocator protein PopB
PA1709		+			<i>popD</i>	Translocator outer membrane protein PopD precursor
PA1711		+			<i>exsE</i>	ExsE
PA1714	-				<i>exsD</i>	ExsD
PA1715		+			<i>pscB</i>	type III export apparatus protein
PA1716		+			<i>pscC</i>	Type III secretion outer membrane protein PscC precursor
PA1717		+			<i>pscD</i>	type III export protein PscD
PA1718		+			<i>pscE</i>	type III export protein PscE
PA1719		+		-	<i>pscF</i>	type III export protein PscF
PA1720		+			<i>pscG</i>	type III export protein PscG
PA1721		+			<i>pscH</i>	type III export protein PscH
PA1722		+			<i>pscI</i>	type III export protein PscI
PA1723		+			<i>pscJ</i>	type III export protein PscJ
PA1724		+			<i>pscK</i>	type III export protein PscK
PA1734		+				hypothetical protein
PA1746		+				hypothetical protein
PA1789		+				hypothetical protein
PA1869	-					probable acyl carrier protein
PA1901				-	<i>phzC2</i>	phenazine biosynthesis protein PhzC
PA1904					<i>phzF2</i>	probable phenazine biosynthesis protein
PA1934						hypothetical protein
PA2037						hypothetical protein
PA2102						hypothetical protein
PA2119		+			<i>adh</i>	alcohol dehydrogenase (Zn-dependent)
PA2127						conserved hypothetical protein
PA2128		+			<i>cupA1</i>	fimbrial subunit CupA1

PA2186		+		-	-			hypothetical protein
PA2191	+		+	-	-	+	<i>exoY</i>	adenylate cyclase ExoY
PA2392	+		+	-	-		<i>pvdP</i>	PvdP
PA2436	+		+	-	-			hypothetical protein
PA2460	+		+	-	-			hypothetical protein
PA2461				-	-			hypothetical protein
PA2576	+		+	-	-			hypothetical protein
PA2730				-	-			hypothetical protein
PA2733				-	-			conserved hypothetical protein
PA2734				-	-			hypothetical protein
PA2753	+		+	-	-	+		hypothetical protein
PA2819				-	-			hypothetical protein
PA2825				-	-		<i>ospR</i>	OspR
PA2826	+			-	-			probable glutathione peroxidase
PA2931	+		+	-	-	+	<i>cifR</i>	CifR
PA3115			+	-	-	+	<i>fimV</i>	Motility protein FimV
PA3140				-	-			hypothetical protein
PA3144	+							hypothetical protein
PA3147			+	-	-	+	<i>wbpJ</i>	probable glycosyl transferase WbpJ
PA3148	+		+	-	-	+	<i>wbpI</i>	UDP-N-acetylglucosamine 2-epimerase WbpI
PA3149			+	-	-		<i>wbpH</i>	probable glycosyltransferase WbpH
PA3150	+		+	-	-	+	<i>wbpG</i>	LPS biosynthesis protein WbpG
PA3151	+		+	-	-		<i>hisF2</i>	imidazoleglycerol-phosphate synthase, cyclase subunit
PA3152	+		+	-	-	+	<i>hisH2</i>	glutamine amidotransferase
PA3154	+		+	-	-	+	<i>wzy</i>	B-band O-antigen polymerase
PA3155			+	-	-		<i>wbpE</i>	UDP-2-acetamido-2-dideoxy-d-ribo-hex-3-uluronic acid transaminase, wbpE
PA3156			+				<i>wbpD</i>	UDP-2-acetamido-3-amino-2,3-dideoxy-d-glucuronic acid N-acetyltransferase, WbpD
PA3157						+		probable acetyltransferase
PA3159			+				<i>wbpA</i>	UDP-N-acetyl-d-glucosamine 6-Dehydrogenase
PA3160			+			+	<i>wzz</i>	O-antigen chain length regulator
PA3161		+		+	-		<i>himD</i>	integration host factor beta subunit
PA3278	-	+	+	-	+	+		hypothetical protein

PA4922															<i>azu</i>	azurin precursor	
PA5027		+														hypothetical protein	
PA5044															<i>pilM</i>	type 4 fimbrial biogenesis protein PilM	
PA5086																hypothetical protein	
PA5087																hypothetical protein	
PA5105			+												<i>hutC</i>	histidine utilization repressor HutC	
PA5106			+													conserved hypothetical protein	
PA5170		+	+	+												<i>arcD</i>	arginine/ornithine antiporter
PA5171		+	+													<i>arcA</i>	arginine deiminase
PA5172		+	+													<i>arcB</i>	ornithine carbamoyltransferase, catabolic
PA5173		+	+													<i>arcC</i>	carbamate kinase
PA5232			+														conserved hypothetical protein
PA5427			+												<i>adhA</i>	alcohol dehydrogenase	
PA5475			+														hypothetical protein
PA5494			+	+	-												hypothetical protein

Biofilm growth specific cluster

	bw/ /bf	tu/ bf	pl/ bf	bw/ lb	tu/ lb	pl/ lb	pl/ bw	pl/ tu	tu/ bw	bf/ lb			
PA0089												<i>tssG1</i>	TssG1
PA0128	-	-	-								+		conserved hypothetical protein
PA0140								-			+	<i>ahpF</i>	alkyl hydroperoxide reductase subunit F
PA0161	-	-	-								+		hypothetical protein
PA0172													hypothetical protein
PA0257		-	-										hypothetical protein
PA0261													hypothetical protein
PA0263	-	-	-			+		+			+	<i>hcpC</i>	secreted protein Hcp
PA0291	-	-	-								+	<i>oprE</i>	Anaerobically-induced outer membrane porin OprE precursor
PA0297		-				+	+	+			+	<i>spuA</i>	probable glutamine amidotransferase
PA0359													hypothetical protein
PA0363	-	-	-									<i>coaD</i>	phosphopantetheine adenylyltransferase
PA0381											+	<i>thiG</i>	thiamine biosynthesis protein, thiazole moiety

PA0408	-	-	-								<i>pilG</i>	twitching motility protein PilG	
PA0409	-	-	-							+	<i>pilH</i>	twitching motility protein PilH	
PA0410	-	-	-							+	<i>pilI</i>	twitching motility protein PilI	
PA0411	-		-							+	<i>pilJ</i>	twitching motility protein PilJ	
PA0424		-	-	+					-	+	<i>mexR</i>	multidrug resistance operon repressor MexR	
PA0506	-		-		+					+		probable acyl-CoA dehydrogenase	
PA0541	-	-	-							+		hypothetical protein	
PA0563	-	-				+	+	+		+		conserved hypothetical protein	
PA0576	-	-	-						-	+	<i>rpoD</i>	sigma factor RpoD	
PA0578	-	-	-	+		+		+	-	+		conserved hypothetical protein	
PA0579	-	-		+		+		+	-	+	<i>rpsU</i>	30S ribosomal protein S21	
PA0581	-	-	-							+		conserved hypothetical protein	
PA0589	-	-	-							+		conserved hypothetical protein	
PA0595		-	-							+	<i>osta</i>	organic solvent tolerance protein OstA precursor	
PA0652			-	+						+	<i>vfr</i>	transcriptional regulator Vfr	
PA0654	-	-	-							+	<i>speD</i>	S-adenosylmethionine decarboxylase proenzyme	
PA0655	-	-	-									hypothetical protein	
PA0667	-	-	-									conserved hypothetical protein	
PA0767	-	-	-							+	<i>lepA</i>	GTP-binding protein LepA	
PA0768	-	-	-							+	<i>lepB</i>	signal peptidase I	
PA0805	-	-				-	+	+	+	-	+		hypothetical protein
PA0915	-	-	-							+		conserved hypothetical protein	
PA0916		-	-							+		conserved hypothetical protein	
PA0944		-	-							+	<i>purN</i>	phosphoribosylaminoimidazole synthetase	
PA0945	-	-	-							+	<i>purM</i>	phosphoribosylaminoimidazole synthetase	
PA0955	-	-	-							+		hypothetical protein	
PA0961			-							+		probable cold-shock protein	
PA0965	-	-					+				<i>ruvC</i>	Holliday junction resolvase RuvC	
PA0974		-	-							+		conserved hypothetical protein	
PA0981	-		-						-			hypothetical protein	
PA0996		-	-			-			+		<i>pqsA</i>	probable coenzyme A ligase	
PA0998	-	-	-			-					<i>pqsC</i>	PqsC	
PA1006		-										conserved hypothetical protein	

PA3013				-	-		+	<i>foaB</i>	fatty-acid oxidation complex beta-subunit	
PA3057	-								hypothetical protein	
PA3112		-					-	+	<i>accD</i>	acetyl-CoA carboxylase beta subunit
PA3162		-				+	+	+	<i>rpsA</i>	30S ribosomal protein S1
PA3217	-	-	-					+	<i>cyaB</i>	CyaB
PA3245	-	-	-					+	<i>minE</i>	cell division topological specificity factor MinE
PA3280	-		-					+	<i>oprO</i>	Pyrophosphate-specific outer membrane porin OprO precursor
PA3292	-	-	-				-	+		hypothetical protein
PA3299	-		-					+	<i>fadD1</i>	long-chain-fatty-acid--CoA ligase
PA3332	-	-	-					+		conserved hypothetical protein
PA3383									<i>phnD</i>	binding protein component of ABC phosphonate transporter
PA3480		-						+		probable deoxycytidine triphosphate deaminase
PA3489	-	-	-					+		conserved hypothetical protein
PA3525	-	-				+	+	+	<i>argG</i>	argininosuccinate synthase
PA3531	-	-	-					+	<i>bfrB</i>	bacterioferritin
PA3611						+		+		hypothetical protein
PA3612								+		conserved hypothetical protein
PA3621	-	-				+	+	+	<i>fdxA</i>	ferredoxin I
PA3633								+	<i>ygbP</i>	4-diphosphocytidyl-2-C-methylerythritol synthase
PA3636		-	-						<i>kdsA</i>	2-dehydro-3-deoxyphosphooctonate aldolase
PA3639								+	<i>accA</i>	acetyl-coenzyme A carboxylase carboxyl transferase (alpha subunit)
PA3642								+	<i>rnhB</i>	ribonuclease HII
PA3644								+	<i>lpxA</i>	UDP-N-acetylglucosamine acyltransferase
PA3645	-	-	-					+	<i>fabZ</i>	(3R)-hydroxymyristoyl-[acyl carrier protein] dehydratase
PA3646	-	-	-					+	<i>lpxD</i>	UDP-3-O-[3-hydroxylauroyl] glucosamine N-acyltransferase
PA3648	-	-	-					+	<i>opr86</i>	outer membrane protein Opr86
PA3653	-		-						<i>frr</i>	ribosome recycling factor
PA3654	-	-						+	<i>pyrH</i>	uridylate kinase
PA3655		-				+		+	<i>tsf</i>	elongation factor Ts
PA3656		-						+	<i>rpsB</i>	30S ribosomal protein S2
PA3686		-	-					+	<i>adk</i>	adenylate kinase
PA3700								+	<i>lysS</i>	lysyl-tRNA synthetase
PA3722	-	-	-					+		hypothetical protein

PA3741	-	-	-							+		hypothetical protein
PA3742	-	-	-	+			-			+	<i>rplS</i>	50S ribosomal protein L19
PA3743		-		+		+				+	<i>trmD</i>	tRNA (guanine-N1)-methyltransferase
PA3745		-		+		+				+	<i>rpsP</i>	30S ribosomal protein S16
PA3770		-	-							+	<i>guaB</i>	inosine-5'-monophosphate dehydrogenase
PA3804	-	-	-							+		hypothetical protein
PA3805	-	-									<i>pilF</i>	type 4 fimbrial biogenesis protein PilF
PA3806	-	-	-				-			+		conserved hypothetical protein
PA3818		-		+		+				+	<i>suhB</i>	extragenic suppressor protein SuhB
PA3822		-								+		conserved hypothetical protein
PA3824	-	-	-							+	<i>queA</i>	S-adenosylmethionine:trna ribosyltransferase-isomerase
PA3903		-								+	<i>prfC</i>	peptide chain release factor 3
PA3905	-	-	-							+		hypothetical protein
PA3906	-	-	-							+		hypothetical protein
PA3907		-								+		hypothetical protein
PA3908	-	-	-							+		hypothetical protein
PA3941	-	-								+		hypothetical protein
PA3966	-	-	-	+						+		hypothetical protein
PA3967	-	-	-							+		hypothetical protein
PA3979	-	-		+		+				+		hypothetical protein
PA3980		-								+		conserved hypothetical protein
PA3982		-		+						+		conserved hypothetical protein
PA3989		-									<i>holA</i>	DNA polymerase III, delta subunit
PA4031		-	-	+						+	<i>ppa</i>	inorganic pyrophosphatase
PA4130	-	-	-									probable sulfite or nitrite reductase
PA4131	-		-				-			+		probable iron-sulfur protein
PA4132	-	-	-				-			+		conserved hypothetical protein
PA4133	-	-	-			-	-	+				cytochrome c oxidase subunit (cbb3-type)
PA4134	-	-	-			-				+		hypothetical protein
PA4139	-	-	-			-	-	-	-	+		hypothetical protein
PA4140	-	-	-							+		hypothetical protein
PA4142	-	-	-							+		probable secretion protein
PA4237		-	-				-			+	<i>rplQ</i>	50S ribosomal protein L17

PA4426	-	-	-		-	-			+		conserved hypothetical protein	
PA4427	-	-	-		-	+			+	<i>sspB</i>	stringent starvation protein B	
PA4428	-	-	-						+	<i>sspA</i>	stringent starvation protein A	
PA4429	-	-	-						+		probable cytochrome c1 precursor	
PA4430	-	-	-						+		probable cytochrome b	
PA4431	-	-	-						+		probable iron-sulfur protein	
PA4432	-	-	-	+	+		+	-	+	<i>rpsI</i>	30S ribosomal protein S9	
PA4433	-	-	-	+	+				+	<i>rplM</i>	50S ribosomal protein L13	
PA4449		-							+	<i>hisG</i>	ATP-phosphoribosyltransferase	
PA4451					+		+				conserved hypothetical protein	
PA4458	-	-	-						+		conserved hypothetical protein	
PA4459	-	-	-						+		conserved hypothetical protein	
PA4460		-									conserved hypothetical protein	
PA4461		-		+				+	-	+	probable ATP-binding component of ABC transporter	
PA4465										+	conserved hypothetical protein	
PA4466		-								+	probable phosphoryl carrier protein	
PA4479				+	+	+				+	<i>mreD</i>	rod shape-determining protein MreD
PA4480	-	-	-							+	<i>mreC</i>	rod shape-determining protein MreC
PA4482										+	<i>gatC</i>	Glu-tRNA(Gln) amidotransferase subunit C
PA4494	-	-	-							+	<i>roxS</i>	RoxS
PA4528	-	-	-							+	<i>pilD</i>	type 4 prepilin peptidase PilD
PA4530	-									+		conserved hypothetical protein
PA4554										+	<i>pilY1</i>	type 4 fimbrial biogenesis protein PilY1
PA4563	-	-	-	+	+	+		-	+		<i>rpsT</i>	30S ribosomal protein S20
PA4568	-	-		+			+		+		<i>rplU</i>	50S ribosomal protein L21
PA4569	-	-	-							+	<i>ispB</i>	octaprenyl-diphosphate synthase
PA4574										+		conserved hypothetical protein
PA4625	-	-	-							+	<i>cdrA</i>	cyclic diguanylate-regulated TPS partner A, CdrA
PA4640										+	<i>mgoB</i>	malate:quinone oxidoreductase
PA4670	-	-	-	+	+			-	+		<i>prs</i>	ribose-phosphate pyrophosphokinase
PA4671				+			+		+			probable ribosomal protein L25
PA4672	-	-	-							+	<i>pth</i>	peptidyl-tRNA hydrolase
PA4673	-	-		+	+					+		conserved hypothetical protein

PA4678	-	-	-						<i>rimI</i>	peptide n-acetyltransferase RimI
PA4728		-						+	<i>folK</i>	2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase
PA4740				+				+	<i>pnp</i>	polyribonucleotide nucleotidyltransferase
PA4743	-	-	-					+	<i>rbfA</i>	ribosome-binding factor A
PA4744								+	<i>infB</i>	translation initiation factor IF-2
PA4745								+	<i>nusA</i>	N utilization substance protein A
PA4746	-	-	-	+		+	-	+		conserved hypothetical protein
PA4747	-	-		+	+	+		+	<i>secG</i>	secretion protein SecG
PA4753	-	-		+	+	+		+		conserved hypothetical protein
PA4757	-	-		+		+		+		conserved hypothetical protein
PA4765	-	-	-			+	-	+	<i>omlA</i>	Outer membrane lipoprotein OmlA precursor
PA4768	-	-	-						<i>smpB</i>	SmpB protein
PA4846	-	-		+		+		+	<i>aroQI</i>	3-dehydroquininate dehydratase
PA4853	-	-	-			+	-	+	<i>fis</i>	DNA-binding protein Fis
PA4932		-		+		+	-	+	<i>rplI</i>	50S ribosomal protein L9
PA4934	-	-		+	+	+		+	<i>rpsR</i>	30S ribosomal protein S18
PA4935	-	-	-	+				+	<i>rpsF</i>	30S ribosomal protein S6
PA4962	-	-	-					+		conserved hypothetical protein
PA4965			-							hypothetical protein
PA4997				+					<i>msbA</i>	transport protein MsbA
PA5033	-	-	-					+		hypothetical protein
PA5043			-			-			<i>pilN</i>	type 4 fimbrial biogenesis protein PilN
PA5045	-	-	-					+	<i>ponA</i>	penicillin-binding protein 1A
PA5046										malic enzyme
PA5049	-	-		+	+	+		+	<i>rpmE</i>	50S ribosomal protein L31
PA5117	-	-		+				+	<i>typA</i>	regulatory protein TypA
PA5118	-	-						+	<i>thiI</i>	thiazole biosynthesis protein ThiI
PA5130			-					+		conserved hypothetical protein
PA5139	-	-	-					+		hypothetical protein
PA5203								+	<i>gshA</i>	glutamate--cysteine ligase
PA5239	-	-		+		+	-	+	<i>rho</i>	transcription termination factor Rho
PA5244				+						conserved hypothetical protein
PA5296	-							+	<i>rep</i>	ATP-dependent DNA helicase Rep

PA5300	-	-																			<i>cycB</i>	cytochrome c5		
PA5302			-																			<i>dadX</i>	catabolic alanine racemase	
PA5315	-	-																				<i>rpmG</i>	50S ribosomal protein L33	
PA5316	-	-																				<i>rpmB</i>	50S ribosomal protein L28	
PA5338																						<i>spoT</i>	guanosine-3',5'-bis(diphosphate) 3'-pyrophosphohydrolase	
PA5351	-																					<i>rubA1</i>	Rubredoxin 1	
PA5366	-	-	-																			<i>pstB</i>	ATP-binding component of ABC phosphate transporter	
PA5367	-	-	-																			<i>pstA</i>	membrane protein component of ABC phosphate transporter	
PA5369	-																					<i>pstS</i>	phosphate ABC transporter, periplasmic phosphate-binding protein, PstS	
PA5435		-	-																					
PA5462																								
PA5479	-	-	-																			<i>gltP</i>	proton-glutamate symporter	
PA5490	-	-	-																			<i>cc4</i>	cytochrome c4 precursor	
PA5491	-	-																						
PA5492	-																							
PA5505	-	-	-																					
PA5554																						<i>atpD</i>	ATP synthase beta chain	
PA5555	-																					<i>atpG</i>	ATP synthase gamma chain	
PA5556																						<i>atpA</i>	ATP synthase alpha chain	
PA5557																						<i>atpH</i>	ATP synthase delta chain	
PA5560	-	-	-																			<i>atpB</i>	ATP synthase A chain	
PA5561																						<i>atpI</i>	ATP synthase protein I	
PA5563																						<i>soj</i>	chromosome partitioning protein Soj	
PA5568	-	-	-																					
PA5569																						<i>rnpA</i>	ribonuclease P protein component	
PA5570																						<i>rpmH</i>	50S ribosomal protein L34	

Planktonic growth specific cluster

	bw /bf	tu/ bf	pl/ bf	bw/ lb	tu/ lb	pl/ lb	pl/ bw	pl/ tu	tu/ bw	bf/ lb	
PA0038	+										hypothetical protein
PA0039											hypothetical protein

PA0052		+	-	-		+	+	-			hypothetical protein
PA0105		+	-	-	-	+	+	-	<i>coxB</i>		cytochrome c oxidase, subunit II
PA0106			-	-	-	+	+	-	<i>coxA</i>		cytochrome c oxidase, subunit I
PA0107		+	-	-	-	+	+	-			conserved hypothetical protein
PA0108	-		-	-	-	+	+	-	<i>coIII</i>		cytochrome c oxidase, subunit III
PA0109		+	-			+	+	-			hypothetical protein
PA0110			-	-	-	+	+	-			hypothetical protein
PA0111			-	-	-			-			hypothetical protein
PA0112			-	-	-			-			hypothetical protein
PA0113			-	-	-			-			probable cytochrome c oxidase assembly factor
PA0122	-	-	-	-	-	+	+	-			conserved hypothetical protein
PA0156					-			-	<i>triA</i>		(RND) triclosan efflux membrane fusion protein, TriA
PA0157					-			-	<i>triB</i>		(RND) triclosan efflux membrane fusion protein, TriB
PA0173			-		-			-			probable methylesterase
PA0175			-	-	-			-	<i>cheR2</i>		probable chemotaxis protein methyltransferase
PA0176			-	-	-			-	<i>aer2</i>		aerotaxis transducer Aer2
PA0177			-	-	-			-			probable purine-binding chemotaxis protein
PA0178			-	-	-			-			probable two-component sensor
PA0179	-	+	-	-	-	+	+	-			probable two-component response regulator
PA0180			-	-	-			-	<i>cttP</i>		chemotactic transducer for trichloroethylene [positive chemotaxis], CttP
PA0200		+	+			+		+			hypothetical protein
PA0249			-	-	-			-			probable acetyltransferase
PA0250			+					-			conserved hypothetical protein
PA0256			-	-	-			-			hypothetical protein
PA0312		+	+	-	-	+		-			conserved hypothetical protein
PA0329			-	-	-			-			conserved hypothetical protein
PA0332		+	+	-				-			hypothetical protein
PA0365			-	-	-			-			hypothetical protein
PA0366					-			-			probable aldehyde dehydrogenase
PA0384			-	-				-			hypothetical protein
PA0387								-			conserved hypothetical protein
PA0388		+				-	+	-			hypothetical protein
PA0432		-	-		-				<i>sahH</i>		S-adenosyl-L-homocysteine hydrolase

PA0452		+				+				probable stomatin-like protein
PA0459						-				probable ClpA/B protease ATP binding subunit
PA0484			+	-	-			+		conserved hypothetical protein
PA0520		+	+	-					+	regulatory protein NirQ
PA0540										hypothetical protein
PA0586				-	-					conserved hypothetical protein
PA0588	+									conserved hypothetical protein
PA0612				-					-	repressor, PtrB
PA0614			+						-	hypothetical protein
PA0616									-	hypothetical protein
PA0619										probable bacteriophage protein
PA0624				-	-					hypothetical protein
PA0631									-	hypothetical protein
PA0635										hypothetical protein
PA0636										hypothetical protein
PA0648										hypothetical protein
PA0656			+	-					+	probable HIT family protein
PA0745				-	-					probable enoyl-CoA hydratase/isomerase
PA0746										probable acyl-CoA dehydrogenase
PA0762										sigma factor AlgU
PA0776										hypothetical protein
PA0865				-	-				+	4-hydroxyphenylpyruvate dioxygenase
PA0866				-	-					aromatic amino acid transport protein AroP2
PA0870				-	-					aromatic amino acid aminotransferase
PA0871				-	-					pterin-4-alpha-carbinolamine dehydratase
PA0872										phenylalanine-4-hydroxylase
PA0887										acetyl-coenzyme A synthetase
PA0921				-	-					hypothetical protein
PA0959				-	-					hypothetical protein
PA0960				-	-					hypothetical protein
PA1002				-	-				+	anthranilate synthase component II
PA1027										probable aldehyde dehydrogenase
PA1041				+	-	-			+	probable outer membrane protein precursor

PA1042		-								conserved hypothetical protein
PA1048		-	-	-						probable outer membrane protein precursor
PA1053										conserved hypothetical protein
PA1084									+	<i>flgI</i> flagellar P-ring protein precursor FlgI
PA1121			-	-	-					<i>yfiR</i> YfiR
PA1172			-							<i>napC</i> cytochrome c-type protein NapC
PA1173			-						+	<i>napB</i> cytochrome c-type protein NapB precursor
PA1174			-	-	-				+	<i>napA</i> periplasmic nitrate reductase protein NapA
PA1175	-		-	-	-				+	<i>napD</i> NapD protein of periplasmic nitrate reductase
PA1176		+	-	-	-				+	<i>napF</i> ferredoxin protein NapF
PA1177		+	+	-	-				+	<i>napE</i> periplasmic nitrate reductase protein NapE
PA1178			-	-	-				-	<i>oprH</i> PhoP/Q and low Mg ²⁺ inducible outer membrane protein H1 precursor
PA1179			-	-	-					<i>phoP</i> two-component response regulator PhoP
PA1180			-	-	-					<i>phoQ</i> two-component sensor PhoQ
PA1202			-							probable hydrolase
PA1246										<i>aprD</i> alkaline protease secretion protein AprD
PA1247										<i>aprE</i> alkaline protease secretion protein AprE
PA1249										<i>aprA</i> alkaline metalloproteinase precursor
PA1283			-							probable transcriptional regulator
PA1287		+								probable glutathione peroxidase
PA1289			-	-	-					hypothetical protein
PA1301	+									probable transmembrane sensor
PA1327			-							probable protease
PA1342			-	-	-					probable binding protein component of ABC transporter
PA1348			-	-	-					hypothetical protein
PA1353			-							hypothetical protein
PA1430										<i>lasR</i> transcriptional regulator LasR
PA1431		-	-	-					+	<i>rsaL</i> regulatory protein RsaL
PA1432		+							+	<i>lasI</i> autoinducer synthesis protein LasI
PA1454			-						+	<i>fleN</i> flagellar synthesis regulator FleN
PA1455			-	-						<i>fliA</i> sigma factor FliA
PA1456			-	-						<i>cheY</i> two-component response regulator CheY
PA1458			-	-						<i>cheA</i> probable two-component sensor

PA2174	+	+	-		+	-	hypothetical protein	
PA2237						-	<i>pslG</i> PslG	
PA2247			-	-	-	-	<i>bkdA1</i> 2-oxoisovalerate dehydrogenase (alpha subunit)	
PA2248			-	-	-	-	<i>bkdA2</i> 2-oxoisovalerate dehydrogenase (beta subunit)	
PA2249		+	-	-	-	-	<i>bkdB</i> branched-chain alpha-keto acid dehydrogenase (lipoamide component)	
PA2250			-	-	-	-	<i>lpdV</i> lipoamide dehydrogenase-Val	
PA2364		+	-	-	+	-	hypothetical protein	
PA2365	-	-	-	-		+	conserved hypothetical protein	
PA2367			-				hypothetical protein	
PA2375		+	-		+	+	hypothetical protein	
PA2381		-	-	-	-	-	hypothetical protein	
PA2422			-			-	hypothetical protein	
PA2423			-				hypothetical protein	
PA2433	+	+	-	-	-	-	hypothetical protein	
PA2434							hypothetical protein	
PA2501	-		-	-	-	+	+	hypothetical protein
PA2504			-	-	-			hypothetical protein
PA2511		+				+	+	probable transcriptional regulator
PA2562		+	-	-	-			hypothetical protein
PA2564			-	-	-	+		hypothetical protein
PA2565		+	-	-	-	+	+	hypothetical protein
PA2566			-	-	-			conserved hypothetical protein
PA2571			-	-	-			probable two-component sensor
PA2573		+	+	-		+		probable chemotaxis transducer
PA2577						-		probable transcriptional regulator
PA2587						-		<i>pqsH</i> probable FAD-dependent monooxygenase
PA2591	-	-	-	-		+	+	probable transcriptional regulator
PA2605		+	-			+		conserved hypothetical protein
PA2607		+						conserved hypothetical protein
PA2618			-	-			+	hypothetical protein
PA2620		+	-					<i>clpA</i> ATP-binding protease component ClpA
PA2622	-	+	-	-		+	+	<i>cspD</i> cold-shock protein CspD
PA2640	-	-	-	-	-			<i>nuoE</i> NADH dehydrogenase I chain E

PA2643	-	-		-	-		+													<i>nuoH</i>	NADH dehydrogenase I chain H	
PA2645				-			-													<i>nuoJ</i>	NADH dehydrogenase I chain J	
PA2646	-			-	-		-													<i>nuoK</i>	NADH dehydrogenase I chain K	
PA2747				+	-	-															hypothetical protein	
PA2754	+	+					-	-	-												conserved hypothetical protein	
PA2762					-	-	-														hypothetical protein	
PA2771					-	-	-														conserved hypothetical protein	
PA2779				+	-																hypothetical protein	
PA2799				+																	hypothetical protein	
PA2827				+	+																conserved hypothetical protein	
PA2841																					probable enoyl-CoA hydratase/isomerase	
PA2849					-	-	-														<i>ohrR</i>	OhrR
PA2883	+																				hypothetical protein	
PA2897				+			-														probable transcriptional regulator	
PA2915					-																hypothetical protein	
PA2920							-														probable chemotaxis transducer	
PA2937				+	-	-															hypothetical protein	
PA2939					-	-	-														<i>pepB</i>	probable aminopeptidase
PA3017	+	+	+		-	-															conserved hypothetical protein	
PA3032					-	-	-														<i>snr1</i>	cytochrome c Snr1
PA3040	+	+	+				-														conserved hypothetical protein	
PA3068					-		-														<i>gdhB</i>	NAD-dependent glutamate dehydrogenase
PA3186					-	-	-														<i>oprB</i>	Glucose/carbohydrate outer membrane porin OprB precursor
PA3187					-	-															<i>gltK</i>	probable ATP-binding component of ABC transporter
PA3188					-	-	-														<i>gltG</i>	probable permease of ABC sugar transporter
PA3216					-		-															hypothetical protein
PA3229				+																	hypothetical protein	
PA3234				+	-	-															probable sodium:solute symporter	
PA3235				+	-	-															conserved hypothetical protein	
PA3311							-														conserved hypothetical protein	
PA3316				+	-	-															probable permease of ABC transporter	
PA3343					-																hypothetical protein	
PA3345					-	-															hypothetical protein	

PA3346		-	-	-		-	probable two-component response regulator		
PA3347		-	-	-		-	hypothetical protein		
PA3348				-		<i>cheR1</i>	probable chemotaxis protein methyltransferase		
PA3349		+	-	-		+	+	probable chemotaxis protein	
PA3351		+				+	+	<i>flgM</i>	
PA3352		+				+	+	hypothetical protein	
PA3369				-			+	hypothetical protein	
PA3371		+					+	hypothetical protein	
PA3415		+	+	-			+	probable dihydrolipoamide acetyltransferase	
PA3416				-	-	-		probable pyruvate dehydrogenase E1 component, beta chain	
PA3418		+	-	-			+	+	<i>ldh</i>
PA3451		+	-	-		+	+	+	hypothetical protein
PA3465				-		-			conserved hypothetical protein
PA3477			-	-	-		+	+	<i>rhIR</i>
PA3496		-	-	-	-	-			hypothetical protein
PA3526			+	-			+	+	probable outer membrane protein precursor
PA3568				-	-	-			probable acetyl-coa synthetase
PA3569	+			-	-	-			<i>mmsB</i>
PA3570	+			-	-	-			<i>mmsA</i>
PA3622			+	-	-			+	<i>rpoS</i>
PA3628							+		probable esterase
PA3629							+		<i>adhC</i>
PA3662				-	-	-			hypothetical protein
PA3674						-			hypothetical protein
PA3684	-	-	+	-	-		+	+	hypothetical protein
PA3688	+		+	-	-		+	+	hypothetical protein
PA3723				-	-	-			probable FMN oxidoreductase
PA3724				-	-	-		+	<i>lasB</i>
PA3740			+						hypothetical protein
PA3753									conserved hypothetical protein
PA3784				-		-			hypothetical protein
PA3785				-		-		-	conserved hypothetical protein
PA3786				-	-				hypothetical protein

PA3792										<i>leuA</i>	2-isopropylmalate synthase
PA3833		+		-							hypothetical protein
PA3846		+		-						-	hypothetical protein
PA3847				-						-	conserved hypothetical protein
PA3848				-							hypothetical protein
PA3851		+									hypothetical protein
PA3858				-						-	probable amino acid-binding protein
PA3922				-						-	conserved hypothetical protein
PA3923				-							hypothetical protein
PA3945				-						-	conserved hypothetical protein
PA3957			+								probable short-chain dehydrogenase
PA3986		+	+								hypothetical protein
PA4012			+								hypothetical protein
PA4079				-						-	probable dehydrogenase
PA4112				-						-	probable sensor/response regulator hybrid
PA4129	-	-	-								hypothetical protein
PA4218				-						-	<i>ampP</i> AmpP
PA4219				-						-	hypothetical protein
PA4220	+	+	+							-	hypothetical protein
PA4221	+									-	<i>fptA</i> Fe(III)-pyochelin outer membrane receptor precursor
PA4222										-	<i>pchI</i> probable ATP-binding component of ABC transporter
PA4223	+									-	<i>pchH</i> probable ATP-binding component of ABC transporter
PA4224	+									-	<i>pchG</i> pyochelin biosynthetic protein PchG
PA4225										-	<i>pchF</i> pyochelin synthetase
PA4226										-	<i>pchE</i> dihydroaeruginosic acid synthetase
PA4227	+									-	<i>pchR</i> transcriptional regulator PchR
PA4228										-	<i>pchD</i> pyochelin biosynthesis protein PchD
PA4229										-	<i>pchC</i> pyochelin biosynthetic protein PchC
PA4230	+									-	<i>pchB</i> salicylate biosynthesis protein PchB
PA4231										-	<i>pchA</i> salicylate biosynthesis isochorismate synthase
PA4290											probable chemotaxis transducer
PA4294		+		-						-	hypothetical protein
PA4296		+		-						-	<i>pprB</i> two-component response regulator, PprB

PA4297		-	-	-	-	-	-	-	-	<i>tadG</i>	TadG
PA4298		-	-	-	-	-	-	-	-		hypothetical protein
PA4299		-	-	-	-	-	-	-	-	<i>tadD</i>	TadD
PA4300		+	-	-	-	-	-	-	-	<i>tadC</i>	TadC
PA4301		-	-	-	-	-	-	-	-	<i>tadB</i>	TadB
PA4302		-	-	-	-	-	-	-	-	<i>tadA</i>	TadA ATPase
PA4303		-	-	-	-	-	-	-	-	<i>tadZ</i>	TadZ
PA4304		-	-	-	-	-	-	-	-	<i>rcpA</i>	RcpA
PA4305		+	-	-	-	-	+	+	-	<i>rcpC</i>	RcpC
PA4306	-	+	-	-	-	-	+	+	-	<i>flp</i>	Type IVb pilin, Flp
PA4311									-		conserved hypothetical protein
PA4315	-	-		-					-	<i>mvaT</i>	transcriptional regulator MvaT, P16 subunit
PA4324	-	-		-	-		+	+			hypothetical protein
PA4377				-	-			+	-		hypothetical protein
PA4410								-	-	<i>ddlB</i>	D-alanine--D-alanine ligase
PA4411									-	<i>murC</i>	UDP-N-acetylmuramate--alanine ligase
PA4412										<i>murG</i>	UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide)
PA4414							-			<i>murD</i>	UDP-N-acetylmuramoylalanine--D-glutamate ligase
PA4415		-								<i>mraY</i>	phospho-N-acetylmuramoyl-pentapeptide-transferase
PA4417									-	<i>murE</i>	UDP-N-acetylmuramoylalanyl-D-glutamate-2, 6-diaminopimelate ligase
PA4418									-	<i>ftsI</i>	penicillin-binding protein 3
PA4420											conserved hypothetical protein
PA4474	+								-		conserved hypothetical protein
PA4507									-		hypothetical protein
PA4572		+	-	-	-	-	+	+	-	<i>fkIB</i>	peptidyl-prolyl cis-trans isomerase FklB
PA4573		+	-	-	-	-	+	+	-		hypothetical protein
PA4590			-	-	-	-	+	+	-	<i>pra</i>	protein activator
PA4607			-	-	-	-			-		hypothetical protein
PA4608		+	+	-	-	-	+	+	-		hypothetical protein
PA4611			+	-	-	-			-		hypothetical protein
PA4633			+	-			+		-		probable chemotaxis transducer
PA4641			-	-	-	-			-		still frameshift hypothetical protein
PA4648			-	-	-	-			-		hypothetical protein

PA5208				-	-	-			-	conserved hypothetical protein
PA5213				-	-	-			-	<i>gcvP1</i> glycine cleavage system protein P1
PA5214				-					-	<i>gcvH1</i> glycine cleavage system protein H1
PA5245									-	conserved hypothetical protein
PA5253									-	<i>algP</i> alginate regulatory protein AlgP
PA5255									-	<i>algQ</i> Alginate regulatory protein AlgQ
PA5261									-	<i>algR</i> alginate biosynthesis regulatory protein AlgR
PA5301										probable transcriptional regulator
PA5348										probable DNA-binding protein
PA5350										<i>rubA2</i> Rubredoxin 2
PA5359										hypothetical protein
PA5424										conserved hypothetical protein
PA5482										hypothetical protein
PA5527										hypothetical protein
PA5543										hypothetical protein
PA5545										conserved hypothetical protein
PA5546										conserved hypothetical protein