

Supplementary Table 1

Oligonucleotides used in this study.

Name/target	Forward 5' -> 3'	Reverse 5' -> 3'
A1S_r01 (16S rRNA) <sup>a</sup>	CAGCTCGTGTCTGAGATGT	CGTAAGGGCCATGATGACTT
A1S_0111	TTGGTCGAGTCAATCTGCAA	CTCGGGTCCCAATAAAATCA
A1S_0112	ACGCCAGTCTGGTGGTATTC	AGGTTCGAACAGCAATACGG
A1S_1032	AAGCCAGTCAAGCAACTGGT	TCAGAATCTGCTGCACCATC
A1S_1292	ACGCAACGCGTAATAAAGTG	TAAAGGGTCAAAGGGCGAAC
A1S_1509	CCAAGGAAGGCGCTGT	TTGGGGAATGGCTTGC
A1S_1699	CAAAGACATTGCTGGTCGTG	AATCACGCTTGGACCTTCAC
A1S_3273	GGGTACACCTTCAGCAGAGC	GCACCATATTTACGGGCAAC
A1S_0095	CCGCAAAGTTATGCTGTGAA	GACGTAAACCCGTCCAGAAA
A1S_1336	CGTGCGATGGTACGTATTTG	ACGGTTCACTGCATCTTGTG
A1S_0268	GAGAGGATCCATAAATATTA AGAAAATATATTAC	GAGAGGATCCTTAGATTAAGAA ATCTTCAAG
A1S_2562	CACCATGAATATGCTCAAAGA CAT	GGTTGAAATGGTCTCACCAACTG G

<sup>a</sup> Oligonucleotide sequences obtained from **Higgins et al.** 2004 J Antimicrob Chemother **54**: 821-823.

**Supplementary Table 2****Genes up-regulated more than 4-fold in strain 17978hm**

<b>Locus-tag</b>	<b>Gene product</b>	<b>Times-fold difference</b>
A1S_0109	homoserine lactone synthase	30.7
A1S_0110	hypothetical protein	7.9
A1S_0111	eR transcriptional regulator	5.7
A1S_0112	Acyl-CoA synthetase/AMP-acid ligases II	558.6
A1S_0113	Acyl-CoA dehydrogenase	536.6
A1S_0114	Acyl carrier protein	727.2
A1S_0115	Amino acid adenylation	611.4
A1S_0116	RND superfamily-like exporters	240.6
A1S_0117	hypothetical protein	211.4
A1S_0118	hypothetical protein	53.8
A1S_0119	Phosphopantethiene-protein transferase	47.1
A1S_0628	putative transposase	42.9
A1S_0739	putative transcriptional regulator	4.1
A1S_0745	hypothetical protein	21.7
A1S_0921	arginine/ornithine antiporter	4.5
A1S_0922	putative homocysteine S-methyltransferase family protein	4.3
A1S_1032	hypothetical protein	10.0
A1S_1033	putative antigen	8.0
A1S_1078	hypothetical protein	6.4
A1S_1079	dichlorophenol hydroxylase (EC:1.14.13.20 )	10.6
A1S_1081	putative transcriptional regulator	6.2
A1S_1256	putative transcriptional regulator	21.4
A1S_1272	putative transcriptional regulator	4.8
A1S_1292	putative signal peptide	49.0
A1S_1293	hypothetical protein	35.7
A1S_1294	hypothetical protein	34.4
A1S_1295	hypothetical protein	13.5
A1S_1296	hypothetical protein	4.6
A1S_1297	hypothetical protein	5.8
A1S_1304	hypothetical protein	4.7
A1S_1357	alanine racemase	70.9
A1S_1384	CinA-like protein	5.7
A1S_1404	putative cysteine desulfurase 1 (Csd)	4.7
A1S_1405	putative cysteine desulfurase 1 (Csd)	5.7
A1S_1406	major membrane protein I (MMP-I)	5.8
A1S_1407	serine acetyltransferase	4.4
A1S_1408	putative rhodanese-related sulfurtransferase	5.2
A1S_1438	putative coenzyme F420-dependent N5N10-methylene tetrahydromethanopterin reductase	12.9
A1S_1439	putative coenzyme F420-dependent N5N10-methylene tetrahydromethanopterin reductase	16.8
A1S_1440	putative transporter (MFS superfamily)	4.2
A1S_1507	fimbrial protein	13.8
A1S_1508	fimbrial biogenesis outer membrane usher protein	18.3
A1S_1509	pili assembly chaperone	17.2
A1S_1510	fimbrial protein	12.2
A1S_1699	acetoin:26-dichlorophenolindophenol oxidoreductase alpha subunit	7.4
A1S_1700	acetoin:26-dichlorophenolindophenol oxidoreductase beta subunit (EC:1.2.4.1 )	7.3
A1S_1701	dihydrolipoamide acetyltransferase	5.5
A1S_1702	dihydrolipoamide dehydrogenase	6.2
A1S_1703	dihydrolipoamide dehydrogenase	6.7
A1S_1751	AdeA membrane fusion protein	8.7
A1S_1769	putative RND family drug transporter	5.1
A1S_1770	hypothetical protein	5.3
A1S_2396	putative transcriptional regulator	4.1
A1S_2554	putative transposase	27.6
A1S_2647	putative transcriptional regulator	4.1
A1S_2648	hypothetical protein	6.9
A1S_2649	putative regulatory protein	6.9
A1S_3104	putative ATP-dependent RNA helicase	4.5
A1S_3120	hypothetical protein	4.2
A1S_3146	multidrug efflux transport protein	4.1
A1S_3273	putative peptide signal	4.8

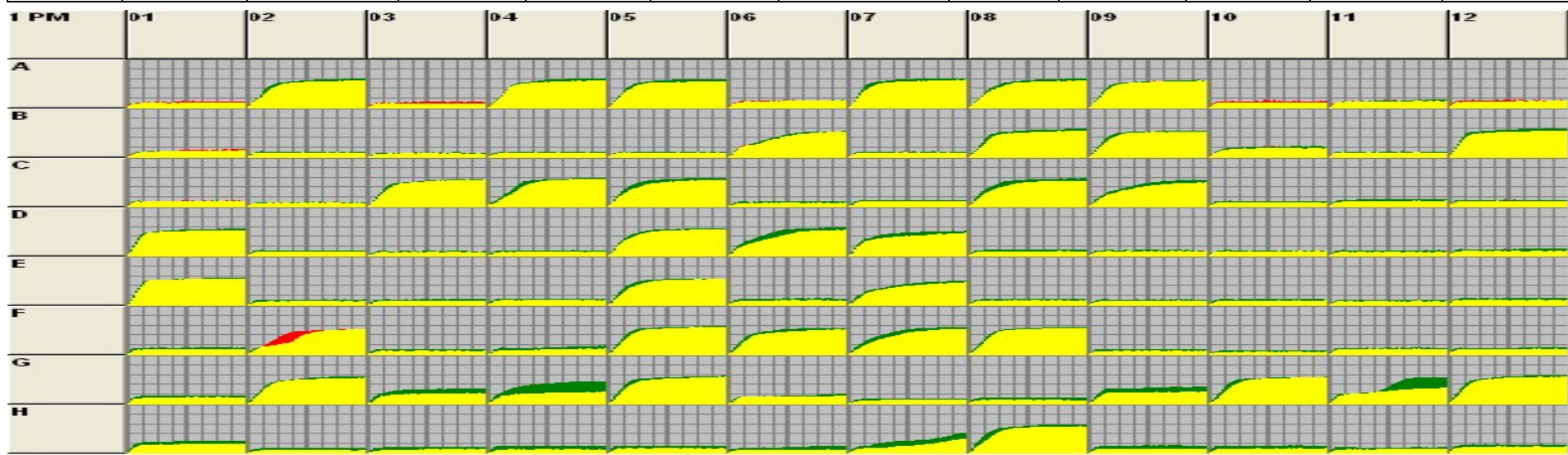
**Genes down-regulated more than 4-fold in strain 17978hm**

<b>Locus-tag</b>	<b>Gene product</b>	<b>Times-fold difference</b>
A1S_1186	ATP-dependent protease Hsp 100	-26.7
A1S_2183	putative signal peptide	-21.1
A1S_1950	putative universal stress protein	-19.9
A1S_0095	D-amino acid dehydrogenase (EC:1.4.99.1 )	-17.4
A1S_0771	hypothetical protein	-16.6
A1S_3113	hypothetical protein	-16.0
A1S_3350	hypothetical protein	-14.4
A1S_2195	hypothetical protein	-12.6
A1S_1708	beta-lactamase-like protein	-12.2
A1S_3317	putative outer membrane protein	-12.2
A1S_1030	DNA-binding ATP-dependent protease La	-12.1
A1S_1932	hypothetical protein	-10.9
A1S_2960	chaperone Hsp70	-10.6
A1S_0096	alanine racemase 2 PLP-binding, catabolic	-9.7

A1S_2093	hypothetical protein	-8.9
A1S_0558	aconitate hydratase 1 (EC:4.2.1.3 )	-8.8
A1S_1193	OmpA/MotB	-8.8
A1S_3175	bacterioferritin	-8.6
A1S_2070	P-type ATPase Mg2+ ATPase transporter (EC:3.6.3.2 )	-8.4
A1S_1031	DNA-binding ATP-dependent protease La	-8.2
A1S_1687	transcriptional regulator	-8.1
A1S_1338	hypothetical protein	-8.1
A1S_0800	bacterioferritin	-8.0
A1S_1046	Lysine exporter protein (LysE/YggA)	-7.9
A1S_3023	hypothetical protein	-7.8
A1S_1984	D-amino acid dehydrogenase small subunit	-7.7
A1S_0363	hypothetical protein	-7.2
A1S_0683	putative sigma (54) modulation protein RpoX	-6.9
A1S_2538	outer membrane protein CarO precursor	-6.8
A1S_1266	hypothetical protein	-6.8
A1S_1337	Phenylacetic acid degradation B	-6.7
A1S_2820	hypothetical protein	-6.7
A1S_1339	Phenylacetate-CoA oxygenase PaaJ subunit	-6.6
A1S_3277	putative pirin-like protein	-6.5
A1S_0301	hypothetical protein	-6.5
A1S_1267	putative lactam utilization protein	-6.4
A1S_1910	ATP-binding protease component	-6.4
A1S_1246	putative universal stress protein	-6.1
A1S_0445	hypothetical protein	-6.1
A1S_0097	hypothetical protein	-6.1
A1S_1270	hypothetical protein	-5.9
A1S_3046	oligopeptidase A	-5.8
A1S_2296	putative protease	-5.8
A1S_1269	putative allophanate hydrolase subunit 1 and 2	-5.8
A1S_1340	Phenylacetate-CoA oxygenase/reductase PaaK subunit	-5.8
A1S_2809	bacteriolytic lipoprotein entericidin B	-5.8
A1S_1343	PaaC	-5.7
A1S_1268	hypothetical protein	-5.6
A1S_2616	hypothetical protein	-5.5
A1S_0210	transposase	-5.5
A1S_2664	chaperone Hsp60	-5.4
A1S_2291	hypothetical protein	-5.3
A1S_1342	putative enoyl-CoA hydratase II	-5.3
A1S_2450	putative pyruvate decarboxylase	-5.2
A1S_2259	putative signal peptide	-5.2
A1S_2840	outer membrane protein A	-5.2
A1S_2959	Hsp 24 nucleotide exchange factor	-5.1
A1S_1925	cytochrome d terminal oxidase polypeptide subunit II	-5.1
A1S_1433	ubiquinol oxidase subunit II	-5.1
A1S_0207	hypothetical protein	-5.1
A1S_0646	IcmB protein	-5.0
A1S_2449	aromatic amino acid transporter (APC family)	-5.0
A1S_0172	hypothetical protein	-5.0
A1S_2072	putative universal stress protein family	-4.9
A1S_1518	putative suppressor of F exclusion of phage T7	-4.9
A1S_1390	hypothetical protein	-4.8
A1S_1862	hypothetical protein	-4.8
A1S_0496	putative phosphatidylglycerophosphatase B	-4.7
A1S_0412	catalase (EC:1.11.1.6 )	-4.7
A1S_1926	hypothetical protein	-4.7
A1S_0884	putative outer membrane protein	-4.7
A1S_1726	aspartate ammonia-lyase (aspartase) (EC:4.3.1.1 )	-4.6
A1S_2416	hypothetical protein	-4.6
A1S_3180	putative signal peptide	-4.5
A1S_1335	Phenylacetic acid degradation protein paaN	-4.5
A1S_1924	cytochrome d terminal oxidase polypeptide subunit I	-4.4
A1S_1861	benzoate dioxygenase large subunit	-4.4
A1S_0627	hypothetical protein	-4.4
A1S_2417	starvation-induced peptide utilization protein	-4.3
A1S_0642	hypothetical protein	-4.3
A1S_1336	hypothetical protein	-4.2
A1S_1859	aromatic-ring-hydroxylating dioxygenase beta subunit	-4.2
A1S_2696	hypothetical protein	-4.2
A1S_3122	hypothetical protein	-4.2
A1S_2092	aminopeptidase N	-4.1
A1S_0299	hypothetical protein	-4.1
A1S_2886	acyl-CoA dehydrogenase	-4.1
A1S_0465	Sec-independent protein translocase protein	-4.1
A1S_0634	hypothetical protein	-4.0
A1S_3246	hypothetical protein	-4.0
A1S_2504	excinuclease ABC subunit B	-4.0

**Supplementary Table 3**  
**PM1 MicroPlate™ Carbon Sources**

A1 Negative Control	A2 L-Arabinose	A3 N-Acetyl-D- Glucosamine	A4 D-Saccharic Acid	A5 Succinic Acid	A6 D-Galactose	A7 L-Aspartic Acid	A8 L-Proline	A9 D-Alanine	A10 D-Trehalose	A11 D-Mannose	A12 Dulcitol
B1 D-Serine	B2 D-Sorbitol	B3 Glycerol	B4 L-Fucose	B5 D-Glucuronic Acid	B6 D-Gluconic Acid	B7 D,L- $\alpha$ -Glycerol- Phosphate	B8 D-Xylose	B9 L-Lactic Acid	B10 Formic Acid	B11 D-Mannitol	B12 L-Glutamic Acid
C1 D-Glucose- 6-Phosphate	C2 D-Galactonic Acid- $\gamma$ -lactone	C3 D,L-Malic Acid	C4 D-Ribose	C5 Tween 20	C6 L-Rhamnose	C7 D-Fructose	C8 Acetic Acid	C9 $\alpha$ -D-Glucose	C10 Maltose	C11 D-Melibiose	C12 Thymidine
D1 L-Asparagine	D2 D-Aspartic Acid	D3 D-Glucosaminic Acid	D4 1,2-Propanediol	D5 Tween 40	D6 $\alpha$ -Keto-Glutaric Acid	D7 $\alpha$ -Keto-Butyric Acid	D8 $\alpha$ -Methyl-D- Galactoside	D9 $\alpha$ -D-Lactose	D10 Lactulose	D11 Sucrose	D12 Uridine
E1 L-Glutamine	E2 M-Tartaric Acid	E3 D-Glucose- 1-Phosphate	E4 D-Fructose- 6-Phosphate	E5 Tween 80	E6 $\alpha$ -Hydroxy Glutaric Acid $\gamma$ -Lactone	E7 $\alpha$ -Hydroxy Butyric Acid	E8 $\beta$ -Methyl-D- Glucoside	E9 Adonitol	E10 Maltotriose	E11 2-Deoxy Adenosine	E12 Adenosine
F1 Glycyl-L- Aspartic Acid	F2 Citric Acid	F3 M-Inositol	F4 D-Threonine	F5 Fumaric Acid	F6 Bromo Succinic Acid	F7 Propionic Acid	F8 Mucic Acid	F9 Glycolic Acid	F10 Glyoxylic Acid	F11 D-Cellobiose	F12 Inosine
G1 Glycyl-L- Glutamic Acid	G2 Tricarballic Acid	G3 L-Serine	G4 L-Threonine	G5 L-Alanine	G6 L-Alanyl- Glycine	G7 Acetoacetic Acid	G8 N-Acetyl- $\beta$ -D- Mannosamine	G9 Mono Methyl Succinate	G10 Methyl Pyruvate	G11 D-Malic Acid	G12 L-Malic Acid
H1 Glycyl-L- Proline	H2 p-Hydroxy Phenyl Acetic Acid	H3 m-Hydroxy Phenyl Acetic Acid	H4 Tyramine	H5 D-Psicose	H6 L-Lyxose	H7 Glucuronamide	H8 Pyruvic Acid	H9 L-Galactonic Acid-Lactone	H10 D-Galacturonic Acid	H11 Phenylethylamine	H12 2-Aminoethanol



PM2A MicroPlate™ CarbonSources

A1 Negative Control	A2 Chondroitin Sulfate C	A3 α-Cyclodextrin	A4 β-Cyclodextrin	A5 γ-Cyclodextrin	A6 Dextrin	A7 Gelatin	A8 Glycogen	A9 Inulin	A10 Laminarin	A11 Mannan	A12 Pectin
B1 N-Acetyl-D-Galactosamine	B2 N-Acetyl-Neuraminic Acid	B3 β-D-Allose	B4 Amygdalin	B5 D-Arabinose	B6 D-Arabitol	B7 L-Arabitol	B8 Arbutin	B9 2-Deoxy-D-Ribose	B10 l-Erythritol	B11 D-Fucose	B12 3-O-β-D-Galactopyranosyl D-Arabinose
C1 Gentiobiose	C2 L-Glucose	C3 Lactitol	C4 D-Melezitose	C5 Maltitol	C6 α-Methyl-D-Glucoside	C7 β-Methyl-D-Galactoside	C8 3-Methyl Glucose	C9 β-Methyl-D-Glucuronic Acid	C10 α-Methyl-D-Mannoside	C11 β-Methyl-D-Xyloside	C12 Palatinose
D1 D-Raffinose	D2 Salicin	D3 Sedoheptulosa	D4 L-Sorbose	D5 Stachyose	D6 D-Tagatose	D7 Turanose	D8 Xylitol	D9 N-Acetyl-D-Glucosaminitol	D10 γ-Amino Butyric Acid	D11 d-Amino Valeric Acid	D12 Butyric Acid
E1 Capric Acid	E2 Caproic Acid	E3 Citraconic Acid	E4 Citramalic Acid	E5 D-Glucosamine	E6 2-Hydroxy Benzoic Acid	E7 4-Hydroxy Benzoic Acid	E8 β-Hydroxy Butyric Acid	E9 γ-Hydroxy Butyric Acid	E10 α-Keto Valeric Acid	E11 Itaconic Acid	E12 5-Keto-D-Gluconic Acid
F1 D-Lactic Acid Methyl Ester	F2 Malonic Acid	F3 Melibionc Acid	F4 Oxalic Acid	F5 Oxalomalic Acid	F6 Quinic Acid	F7 D-Ribono-1,4-Lactone	F8 Sebacic Acid	F9 Sorbic Acid	F10 Succinamic Acid	F11 D-Tartaric Acid	F12 L-Tartaric Acid
G1 Acetamide	G2 L-Alaninamide	G3 N-Acetyl-L-Glutamic Acid	G4 L-Arginine	G5 Glycine	G6 L-Histidine	G7 L-Homoserine	G8 Hydroxy-L-Proline	G9 L-Isoleucine	G10 L-Leucine	G11 L-Lysine	G12 L-Methionine
H1 L-Ornithine	H2 L-Phenylalanine	H3 L-Pyrogutamic Acid	H4 L-Valine	H5 D,L-Carnitine	H6 Sec-Butylamine	H7 D,L-Octopamine	H8 Putrescine	H9 Dihydroxy Acetone	H10 2,3-Butanediol	H11 2,3-Butanone	H12 3-Hydroxy 2-Butanone

