

Supplemental Table 1. Genes differentially regulated during biofilm maturation

ATCC12228 ¹	RP62A ²	Gene	Fold Change ³	Direction ⁴	Description
SE0103		<i>arcB</i>	11.0	↑	Ornithine carbamoyltransferase
SE0104		<i>arcR</i>	4.9	↑	Transcriptional regulator Crp/Fnr family
SE0105		<i>arcD</i>	3.2	↑	Arginine/ornithine transporter
SE0106		<i>arcA</i>	2.5	↑	Arginine deiminase
SE0146	SERP2421		2.1	↑	Putative mechanosensitive ion channel
SE0154	SERP2414		2.8	↑	Putative lipoprotein
SE0182	SERP2393		4.0	↑	6-carboxyhexanoate - COA ligase (EC 6.2.1.4)
SE0183	SERP2391	<i>sspC</i>	6.0	↑	Staphostatin
SE0184	SERP2390	<i>sspB</i>	4.6	↑	Staphopain cysteine protease
SE0206	SERP2371	<i>opp1B</i>		↑	Oligopeptide permease
SE0208	SERP2370	<i>opp1C</i>		↑	Oligopeptide permease
SE0209	SERP2369	<i>opp1D</i>		↑	Oligopeptide permease
SE0210	SERP2368	<i>opp1F</i>		↑	Oligopeptide permease
SE0211	SERP2367		2.5	↑	Putative transport protein
SE0216	SERP2364		3.0	↑	Succinyl-diaminopimelate desuccinylase (EC 3.5.1.8)
SE0231	SERP2349	<i>fosB</i>	2.4	↑	Fosfomycin resistance protein
SE0253	SERP2327		6.4	↑	Dihydrolipoamide dehydrogenase (EC 1.8.1.4); pyruvate dehydrogenase
SE0254	SERP2326		8.1	↑	Acetoin dehydrogenase α subunit (EC 1.1.1.-); pyruvate dehydrogenase
SE0255	SERP2325		7.3	↑	Acetoin dehydrogenase β subunit (EC 1.1.1.-); pyruvate dehydrogenase
SE0256	SERP2324		5.8	↑	Dihydrolipoamide acetyltransferase (EC 2.3.1.2); pyruvate dehydrogenase
SE0284	SERP0162	<i>ctsR</i>	3.2	↑	Transcriptional regulator
SE0285	SERP0163		3.2	↑	UvrB/UvrC domain protein
SE0286	SERP0164		3.1	↑	ATP:guanido phosphotransferase, putative arginine/creatine kinase
SE0376	SERP0258		2.4	↑	Conserved hypothetical protein
SE0400	SERP0284	<i>snoD</i>	2.7	↑	Complex 1 NADH oxidoreductase
SE0532	SERP0417	<i>comF</i>	2.5	↑	superfamily II DNA/RNA helicase ComF
SE0534	SERP0419		2.3	↑	Ribosomal subunit interface protein; contains RaiA region.
SE0570	SERP0457		2.6	↑	Conserved hypothetical protein
SE0599	SERP0488		2.9	↑	Thioredoxin
SE0689	SERP0579		2.1	↑	CoiA-like family competence protein
SE0715	SERP0604		2.1	↑	Putative RNA ligase

SE0784	SERP0672		2.6	↑	Cytochrome d ubiquinol oxidase, subunit 1 (EC 1.10.3-)
SE0797	SERP0686	<i>potA</i>	3.2	↑	Spermidine/putrescine ABC transporter
SE0828	SERP0719		6.1	↑	Lipoprotein VsaC; potential collagen binding protein; YSIRK family
SE0840	SERP0730	<i>sdhC</i>	4.0	↑	Succinate dehydrogenase cytochrome b-558 (EC 1.3.99.1)
SE0850	SERP0740		2.1	↑	Haloacid dehalogenase (HAD)-like hydrolases
SE0851	SERP0741		2.3	↑	Acetyltransferase; GNAT family
SE0947	SERP0837	<i>rbFA</i>	2.1	↑	Ribosome binding factor A
SE0969	SERP0858		2.6	↑	YmaC-like phage related replication protein
SE0970	SERP0859		3.2	↑	Conserved hypothetical protein
SE1007	SERP0894		4.8	↑	Conserved hypothetical protein
SE1066	SERP0956	<i>phoU</i>	2.7	↑	Phosphate transport protein
SE1069	SERP0959	<i>pstC</i>	2.1	↑	Phosphate ABC transporter, permease protein
SE1075	SERP0965	<i>dapA</i>	2.6	↑	Dihydrodipicolinate synthase (EC 4.2.1.52)
SE1076	SERP0966	<i>dapB</i>	2.6	↑	Dihydrodipicolinate reductase (EC 1.3.1.26)
SE1097	SERP0986	<i>sucA</i>	3.7	↑	Oxoglutarate dehydrogenase (succinyl-transferring; EC 1.2.4.2)
SE1154	SERP1035		2.0	↑	3-dehydroquinase synthase; tryptophan synthesis (EC 4.2.3.4)
SE1345	SERP1234	<i>hemC</i>	2.0	↑	Porphobilinogen deaminase; heme synthesis (EC 2.5.1.61)
SE1419	SERP1306		2.6	↑	Conserved hypothetical protein
SE1429	SERP1316	<i>fmtB</i>	3.3	↑	FmtB; LPXTG motif cell wall anchor protein
SE1437	SERP1324	<i>putA</i>	4.4	↑	Proline dehydrogenase (EC 1.5.99.8)
SE1459	SERP1353	<i>pckA</i>	3.2	↑	Phosphoenolpyruvate carboxykinase (EC 4.1.1.49)
SE1469	SERP1367		4.8	↑	Hypothetical protein
SE1522	SERP1377		2.4	↑	Conserved hypothetical protein; putative membrane protein
SE1532	SERP1387	<i>fumC</i>	2.2	↑	Fumarate hydratase (EC 4.2.1.2)
SE1575	SERP1428		2.7	↑	Immunodominant antigen B
SE1626	SERP1480		3.7	↑	Conserved hypothetical protein
SE1712	SERP1721		2.6	↑	Phosphotyrosine protein phosphatase (EC 3.1.3.48)
SE1841	SERP1850	<i>moaA</i>	2.8	↑	Molybdenum cofactor biosynthesis protein A
SE1842	SERP1851	<i>mobA</i>	2.6	↑	Molybdopterin-guanine dinucleotide biosynthesis protein A
SE1843	SERP1852	<i>moaD</i>	2.6	↑	Molybdopterin converting factor, subunit 1
SE1844	SERP1852	<i>moaE</i>	2.3	↑	Molybdopterin converting factor subunit 2
SE1845	SERP1854	<i>mobB</i>	3.2	↑	Molybdopterin-guanine dinucleotide biosynthesis protein B
SE1848	SERP1857	<i>moaB</i>	2.4	↑	Molybdenum precursor biosynthesis/cofactor biosynthesis
SE1850	SERP1859	<i>modC</i>	2.7	↑	Molybdenum transport ATP-binding protein ModC

SE1859	SERP1867		3.0	↑	Conserved hypothetical protein
SE1906	SERP1918		3.1	↑	Amidohydrolase family protein
SE1919	SERP1931		2.1	↑	DNA 3-methyladenine glycosidase
SE1947	SERP1959	<i>tpgX</i>	2.1	↑	TpgX; putative lipoprotein
SE1960	SERP1969		4.3	↑	Putative Type II DNA modification enzyme
SE1962	SERP1973		2.6	↑	General stress protein 26
SE2013	SERP2026	<i>IrgA</i>	5.2	↑	Holin/anti-holin system with CidA
SE2028	SERP2041	<i>gltB</i>	2.8	↑	Glutamate synthase
SE2035	SERP2048	<i>argE</i>	2.7	↑	Acetyl-ornithine deacetylase (EC 3.5.1.16)
SE2044	SERP2057	<i>gltP</i>	4.3	↑	Gluconate transporter - permease
SE2045	SERP2058	<i>gntK</i>	5.6	↑	Gluconokinase
SE2046	SERP2059	<i>gntR</i>	4.3	↑	Gluconate operon transcriptional repressor
SE2048	SERP2061		2.5	↑	Transcriptional regulator; MerR family
SE2049	SERP2062		3.3	↑	Conserved hypothetical protein
SE2063	SERP2076		2.2	↑	Fructose 1,6 bisphosphatase (EC 3.1.3.11)
SE2067	SERP2080		4.3	↑	Putative succinate semialdehyde dehydrogenase
SE2071	SERP2084		2.8	↑	Aldehyde dehydrogenase (EC 1.2.1.3)
SE2074	SERP2087	<i>ddh</i>	6.4	↑	D-lactate dehydrogenase (EC 1.1.1.28)
SE2087	SERP2101	<i>rbsD</i>	3.6	↑	High affinity ribose transport protein
SE2088	SERP2102	<i>rbsU</i>	3.9	↑	Ribose transporter
SE2113	SERP2125		3.0	↑	Hypothetical protein
SE2115	SERP2127	<i>feoA</i>	3.0	↑	Ferrous iron transport protein A
SE2131	SERP2143		2.4	↑	Fructosamine kinase family protein
SE2154	SERP2165		5.9	↑	Coenzyme A disulfide reductase
SE2169	SERP2180		3.0	↑	Anaerobic C4-dicarboxylate membrane transporter, putative
SE2170	SERP2181		2.2	↑	Anaerobic dicarboxylate transporter
SE2173	SERP2184		6.1	↑	Conserved hypothetical protein
SE2174	SERP2185		2.2	↑	Adenylylsulfate kinase
SE2194	SERP2205		3.9	↑	Putative two component sensor histidine kinase
SE2195	SERP2206		2.5	↑	Two component response regulator
SE2199	SERP2210		2.8	↑	Teichoic acid biosynthesis protein F
SE2218	SERP2251	<i>argR</i>	10.3	↑	Transcriptional regulator
SE2220	SERP2253		2.5	↑	Succinyl-diaminopimelate desuccinylase (EC 3.5.1.8)
SE2226	SERP2258		2.9	↑	Putative hemolysin

SE2231	SERP2263		2.3	↑	Autolysin precursor
SE2234	SERP2267		2.8	↑	Conserved hypothetical protein
SE2253	SERP2283		2.4	↑	Phosphonate transport permease
SE2254	SERP2284		2.7	↑	Phosphonate transport permease
SE2390	Not present		2.1	↑	Conserved hypothetical protein
SE2403	SERP0018	<i>geh</i>	5.7	↑	Glycerol ester hydrolase
SE0168	Not present		2.5	↓	Galactosamine-containing minor teichoic acid biosynthesis protein
SE0354	SERP0232		2.3	↓	Cationic amino acid transporter
SE0409	SERP0294		5.2	↓	Conserved hypothetical protein
SE0454	SERP0339	<i>uppP</i>	3.0	↓	Undecaprenyl pyrophosphate phosphatase (EC 3.6.1.27)
SE0464	SERP0350		2.1	↓	Conserved hypothetical protein
SE0465	SERP0351		2.8	↓	Conserved hypothetical protein
SE0555	SERP0440		2.2	↓	Hypothetical protein
SE0577	SERP0465	<i>czcD</i>	2.9	↓	Cation-efflux system membrane protein CzcD
SE0583	SERP0471		2.7	↓	Conserved hypothetical protein
SE0586	SERP0475		2.7	↓	Conserved hypothetical protein
SE0590	SERP0478		2.6	↓	Truncated IS1272 transposase
SE0605	SERP0495		4.1	↓	Conserved hypothetical protein
SE0623	SERP0517		2.1	↓	Conserved hypothetical protein
SE0633	SERP0525		2.5	↓	Conserved hypothetical protein
SE0634	SERP0526		2.2	↓	HesB domain protein; iron sulfur assembly protein
SE0659	SERP0551		2.6	↓	Conserved hypothetical protein
SE0680	SERP0570	<i>oppB</i>	2.6	↓	Oligopeptide transport system permease protein OppB
SE0734	SERP0620		2.7	↓	Conserved hypothetical protein
SE0735	SERP0621		2.7	↓	Conserved hypothetical protein
SE0736	SERP0622		2.0	↓	Conserved hypothetical protein
SE0889	SERP0780		3.0	↓	Conserved hypothetical protein
SE0965	SERP0854		3.2	↓	Conserved hypothetical protein
SE1064	SERP0954		4.8	↓	Conserved hypothetical protein
SE1335	SERP1216		6.4	↓	Conserved hypothetical protein
SE1419	SERP1306		2.1	↓	Conserved hypothetical protein
SE1440	SERP1327	<i>ribE</i>	3.2	↓	Riboflavin synthase alpha chain (EC 2.5.1.9)
SE1441	SERP1328	<i>ribD</i>	3.6	↓	Riboflavin specific deaminase (EC 3.5.4.26)

SE1526	SERP1381		2.2	↓	Putative conserved transcriptional regulator
SE1581	SERP1434		3.7	↓	conserved hypothetical protein
SE1770	SERP1779		2.4	↓	Siderophore biosynthesis protein; lucA/lucC family
SE1771	SERP1780		2.4	↓	Putative transporter
SE1847	SERP1856	<i>moaC</i>	2.9	↓	Molybdenum cofactor biosynthesis protein C
SE2118	SERP2130		9.0	↓	Conserved hypothetical protein
SE2137	SERP2149		3.8	↓	Hypothetical protein
SE2138	SERP2149		5.6	↓	Hypothetical protein
SE2330	SERP0087		4.7	↓	Conserved hypothetical protein
SE2331	SERP0086		13.7	↓	Hypothetical protein
SE2332	SERP0085		9.4	↓	Conserved hypothetical protein
SE2333	SERP0084		13.0	↓	NADH-quinone dehydrogenase subunit 5 (EC 1.6.5.3)
SE2341	SERP0074		2.4	↓	Conserved hypothetical protein
SE2342	SERP0073		2.0	↓	Conserved hypothetical protein
SE2354	SERP0063		3.1	↓	Amino acid/cation (Na ⁺ /H ⁺) symport protein

¹Genome locus tag of *S. epidermidis* ATCC12228. Note that locus tags in alternating bold red and bold font are genes that are predicted to be transcriptionally co-regulated.

²Genome locus tag of *S. epidermidis* RP62A. Note that locus tags in alternating bold and bold red font are genes that are predicted to be transcriptionally co-regulated.

³Fold change (either upregulated or downregulated) of a 72 hour *S. epidermidis* 1457 biofilm in comparison to a 24 hour biofilm

⁴“↑” signifies that a gene was upregulated; “↓” signifies that a gene was downregulated