

Table S1. Genes up ≥ 4 -fold in *mgrA* mutant

SAUSA300 orf number	Fold change	Gene name	Function
0113	22.3	<i>spa</i>	immunoglobulin G binding protein A
0130	97.1		NAD-dependent epimerase
0131	106.5		putative sugar transferase
0132	48.2		glycosyl transferase
0133	25.0		hypothetical protein
0134	7.6		polysaccharide extrusion protein
0346	4.0		high affinity iron transporter
0547	20.0	<i>sdrD</i>	serine-aspartate repeat-containing protein SdrD
0577	4.7		transcriptional regulator
0954	43.9	<i>atlR</i>	MarR family transcriptional regulator
1005	22.8	<i>mntH</i>	manganese transporter
1140	165.1	<i>lytN</i>	peptidoglycan hydrolase
1141	91.0	<i>fmhC</i>	endopeptidase resistance protein
1142	14.4	<i>dprA</i>	DNA protecting protein
1202	8.0		XRE-family transcriptional regulator
1214	4.8		putative threonine aldolase
1294	5.8		hypothetical protein
1327	44.7	<i>ebh</i>	cell surface protein
1702	7.7	<i>sasC</i>	cell surface protein
1739	4.4		hypothetical protein
1740	4.6		putative permease
1741	4.7		putative lipoprotein
2109	24.5	<i>fmtB</i>	truncated FmtB protein
2110	41.4	<i>fmtB</i>	truncated FmtB protein
2218	10.3	<i>sarV</i>	MarR family transcriptional regulator
2237	8.6		putative urea transporter
2238	74.3	<i>ureA</i>	urease subunit gamma
2239	61.5	<i>ureB</i>	urease subunit beta
2240	33.7	<i>ureC</i>	urease subunit alpha
2241	22.5	<i>ureE</i>	urease accessory protein UreE
2242	20.2	<i>ureF</i>	urease accessory protein UreF
2243	14.9	<i>ureG</i>	urease accessory protein UreG
2244	13.0	<i>ureD</i>	urease accessory protein UreD
2435	7.5	<i>sasG</i>	truncated surface protein G
2436	8.3	<i>sasG</i>	truncated surface protein G
2440	5.4	<i>fnbB</i>	fibronectin binding protein B
2463	17.2	<i>ddh</i>	D-lactate dehydrogenase
2465	21.5		putative peptide transport system ATP-binding protein
2466	8.6		putative peptide transport system permease protein
2488	6.9	<i>feoA</i>	ferrous iron transport protein A
2522	4.6		hypothetical protein
2523	4.4		hypothetical protein
2524	4.2		hypothetical protein
2555	10.7		glutathione peroxidase
2585	4.7	<i>asp3</i>	accessory secretory protein Asp3
2586	5.1	<i>asp2</i>	accessory secretory protein Asp2
2587	5.5	<i>asp1</i>	accessory secretory protein Asp1
2588	5.2	<i>secY2</i>	preprotein translocase subunit SecY2
2589	5.0	<i>sraP</i>	serine-rich adhesin for platelets
2596	13.8	<i>cap1C</i>	capsular polysaccharide biosynthesis protein Cap1C

2597	18.9	<i>cap1B</i>	capsular polysaccharide biosynthesis protein Cap1B
2598	18.5	<i>cap1A</i>	capsular polysaccharide biosynthesis protein Cap1A
2612	4.2	<i>hisG</i>	ATP phosphoribosyltransferase catalytic subunit
2613	5.2	<i>hisZ</i>	ATP phosphoribosyltransferase regulatory subunit
2614	7.7		putative polysaccharide deacetylase

Genes down ≥ 4 -fold in *mgrA* mutant

SAUSA300 orf number	Fold change	Gene name	Function
0067	5.1		universal stress protein
0151	5.7	<i>adhE</i>	bifunctional acetaldehyde-CoA/alcohol dehydrogenase
0152	8.7	<i>cap5A</i>	capsular polysaccharide biosynthesis protein Cap5A
0153	4.0	<i>cap5B</i>	capsular polysaccharide biosynthesis protein Cap5B
0154	5.0	<i>cap5C</i>	capsular polysaccharide biosynthesis protein Cap5C
0156	4.2	<i>cap5E</i>	capsular polysaccharide biosynthesis protein Cap5E
0174	4.7		hypothetical protein
0175	4.8		putative lipoprotein
0176	5.2		ABC transporter permease
0177	6.1		hypothetical protein
0178	4.4		hypothetical protein
0220	4.2	<i>pflB</i>	formate acetyltransferase
0221	4.9	<i>pflA</i>	pyruvate formate-lyase activating enzyme
0382	4.1		sodium:dicarboxylate symporter family protein
0491	5.5	<i>cysK</i>	cysteine synthase A
0594	5.1	<i>adh</i>	alcohol dehydrogenase
0667	4.5		hypothetical protein
0672	3985	<i>mgrA</i>	transcriptional regulator
0673	5.7		cobalamin synthesis protein/P47K family protein
0776	5.0	<i>nuc</i>	nuclease
0815	8.9	<i>ear</i>	Ear protein
1295	17.1		CSD family cold shock protein
1329	4.2		amino acid permease
1330	4.3	<i>ilvA</i>	threonine dehydratase
1331	4.1	<i>ald</i>	alanine dehydrogenase
1381	19.2	<i>lukF</i>	Panton-Valentine leukocidin, LukF-PV
1382	23.4	<i>lukS</i>	Panton-Valentine leukocidin, LukS-PV
1440	5.8		hypothetical protein
1581	7.5		hypothetical protein
1582	4.4		hypothetical protein
1678	4.7	<i>fhs</i>	formate-tetrahydrofolate ligase
1753	8.7	<i>spIF</i>	serine protease SpIF
1754	7.1	<i>spIE</i>	serine protease SpIE
1755	8.4	<i>spID</i>	serine protease SpID
1756	8.0	<i>spIC</i>	serine protease SpIC
1757	10.2	<i>spIB</i>	serine protease SpIB
1758	10.2	<i>spIA</i>	serine protease SpIA
1918	5.9		truncated beta-hemolysin
1919	4.9		staphylococcal complement inhibitor SCIN
1920	16.0	<i>chs</i>	chemotaxis-inhibiting protein CHIP
1974	7.9	<i>lukB</i>	leukocidin
1975	7.5	<i>lukA</i>	leukocidingr
2164	4.5		hypothetical protein

2245	4.8	<i>sarR</i>	SarR transcriptional regulator
2453	5.8		ABC transporter ATP-binding protein
2454	6.1		membrane spanning protein
2550	5.7	<i>nrdG</i>	anaerobic ribonucleotide reductase, small subunit
2551	4.5	<i>nrdD</i>	anaerobic ribonucleoside triphosphate reductase
2572	6.9	<i>aur</i>	zinc metalloproteinase aureolysin