

**Table S2: List of the significantly upregulated proteins in *S. aureus* biofilm in comparison to planktonic culture (fold change >2, p <0.05).**

\* CM denotes Cytoplasmic Membrane.

Accession ID	Protein Name	Gene Names	Fold Change	Protein Pathways	Subcellular Localisation
AIO20486.1	hypothetical protein KQ76_04110	SA0772	5.09		Unknown
AIO21910.1	molybdenum ABC transporter permease	modB	4.68	ABC transporters	CM*
AIO20812.1	DNA-directed RNA polymerase subunit omega	rpoZ SA1053	4.52	Metabolic pathways, Pyrimidine metabolism, RNA polymerase, Purine metabolism	Unknown
AIO20306.1	glycosyltransferase	tagX SA0596	4.32		Unknown
AIO19852.1	branched-chain amino acid transporter II carrier protein	SA0180	4.04		CM
AIO21307.1	hypothetical protein KQ76_08425	SA1443	3.57		Cytoplasmic
AIO20635.1	hypothetical protein KQ76_04890	SACOL1046	3.43		Unknown
AIO21316.1	hypothetical protein KQ76_08470	SAS049	3.38		Unknown
AIO21773.1	membrane protein	SA1937	3.32		CM
AIO21982.1	hypothetical protein KQ76_12230	SACOL2344	3.30		Cytoplasmic
AIO21211.1	2-oxoisovalerate dehydrogenase	bfmBAA	3.19	Metabolic pathways, Biosynthesis of secondary metabolites,	Cytoplasmic

				Biosynthesis of antibiotics, Propanoate metabolism, Valine, leucine and isoleucine degradation	
AIO20267.1	NAD(P)H-dependent oxidoreductase	SA0558	3.17		Unknown
AIO21660.1	DNA-binding protein		3.12		Cytoplasmic
AIO22226.1	fructosamine kinase	SA2374	2.97		Cytoplasmic
AIO19750.1	transposase	SA0379	2.91		Cytoplasmic
AIO19867.1	peptide ABC transporter substrate-binding protein	SACOL0187	2.91	Quorum sensing	Unknown
AIO21786.1	lytic regulatory protein	truncated-SA	2.89		CM
AIO22040.1	formate/nitrite transporter	SACOL2401	2.84		CM
AIO22234.1	pantoate--beta-alanine ligase	panC SACOL2614	2.82	Metabolic pathways, Biosynthesis of secondary metabolites, beta- Alanine metabolism, Pantothenate and CoA biosynthesis	Cytoplasmic
AIO20180.1	2-amino-4-hydroxy-6- hydroxymethyldihydropteridine pyrophosphokinase	folK SACOL0560	2.78	Metabolic pathways, Folate biosynthesis	Cytoplasmic

AIO20754.1	fibrinogen-binding protein	SA1000	2.78			Extracellular
AIO21317.1	hypothetical protein KQ76_08475	SA1452	2.76			Extracellular
AIO20178.1	dihydropteroate synthase	folP SA0472	2.76	Metabolic pathways, biosynthesis	Folate	Cytoplasmic
AIO20957.1	30S ribosomal protein S14	rpsN rpsN2 SA1171	2.76	Ribosome		Cytoplasmic
AIO20787.1	cell division protein FtsA	ftsA SA1028	2.74			Cytoplasmic
AIO20718.1	glycerophosphodiester phosphodiesterase	SA0969	2.72	Glycerophospholipid metabolism		Cytoplasmic
AIO21337.1	50S ribosomal protein L27	rpmA SA1471	2.64	Ribosome		Cytoplasmic
AIO21082.1	zinc metallopeptidase	SACOL1500	2.59			CM
AIO21503.1	restriction endonuclease subunit S	hsdS	2.57			Unknown
AIO21727.1	membrane protein	yidC SA1893	2.53	Quorum sensing, Bacterial secretion system	Protein export,	CM
AIO21819.1	hypothetical protein KQ76_11385	SA1986	2.52			CM
AIO21839.1	hyaluronate lyase	hysA	2.50			Extracellular
AIO22003.1	L-lactate permease	SACOL2363	2.47			CM
AIO21769.1	hypothetical protein KQ76_11075	SA1933	2.47			Cytoplasmic
AIO20806.1	orotidine 5'-phosphate decarboxylase	pyrF SA1047	2.42	Metabolic pathways, metabolism	Pyrimidine	Cytoplasmic

AIO20697.1	spermidine/putrescine ABC transporter ATP-binding protein	potA SA0950	2.39	ABC transporters	CM
AIO21790.1	glucosamine--fructose-6-phosphate aminotransferase	glmS SACOL2145	2.37	Metabolic pathways, Amino sugar and nucleotide sugar metabolism, Alanine, aspartate and glutamate metabolism, Biosynthesis of antibiotics	Cytoplasmic
AIO20817.1	peptide deformylase	SA1058	2.35		Cytoplasmic
AIO21826.1	PTS system lactose-specific transporter subunit IIA	lacF SA1993	2.34	Metabolic pathways, Galactose metabolism, Phosphotransferase system (PTS)	Cytoplasmic
AIO20444.1	glyceraldehyde-3-phosphate dehydrogenase	gapA1 gap gapA SA0727	2.34	Metabolic pathways, Biosynthesis of antibiotics, Biosynthesis of amino acids, Microbial metabolism in diverse environments, Carbon metabolism, Biosynthesis of	Cytoplasmic

					secondary metabolites, Glycolysis / Gluconeogenesis	
AIO21863.1	30S ribosomal protein S5	rpsE SA2031	2.33	Ribosome	Cytoplasmic	
AIO21333.1	ATP-dependent DNA helicase RuvB	ruvB SACOL1696	2.33	Homologous recombination	Cytoplasmic	
AIO20122.1	cystathionine gamma-synthase	metB	2.33	Metabolic pathways, Biosynthesis of antibiotics, Biosynthesis of amino acids, Cysteine and methionine metabolism, Glycine, serine and threonine metabolism, Sulfur metabolism	Cytoplasmic	
OOC89123.1	heme ABC transporter ATP-binding protein	SACOL0779	2.32		Cytoplasmic	
AIO22129.1	helicase	SACOL2499	2.28		Unknown	
AIO20958.1	guanosine 5'-monophosphate oxidoreductase	guaC SACOL1371	2.28	Purine metabolism	Cytoplasmic	
AIO21372.1	helicase DnaB	SACOL1732	2.27		Cytoplasmic	
AIO20949.1	threonine synthase	thrC SACOL1363	2.27	Metabolic pathways, Biosynthesis of secondary metabolites, Microbial metabolism in diverse environments, Vitamin B6	Cytoplasmic	

				metabolism, Glycine, serine and threonine metabolism, Biosynthesis of amino acids	
AIO21528.1	hypothetical protein KQ76_09615	SA1657	2.26		Unknown
AIO19973.1	5'-nucleotidase	SA0295	2.23		Unknown
				Metabolic pathways, Biosynthesis of secondary metabolites, Biosynthesis of antibiotics, Biosynthesis of amino acids, Alanine, aspartate and glutamate metabolism, Arginine biosynthesis	Cytoplasmic
AIO20535.1	argininosuccinate lyase	argH SA0821	2.21		
				Metabolic pathways, Biosynthesis of secondary metabolites, Biosynthesis of antibiotics, Biosynthesis of amino acids, Pantothenate and CoA biosynthesis, 2-Oxocarboxylic acid metabolism, C5-Branched dibasic acid metabolism, Butanoate metabolism,	CM
AIO21844.1	acetolactate synthase	alsS	2.21		

				Valine, leucine and isoleucine biosynthesis	
AIO21768.1	pantothenate kinase	coaW SA1932	2.17	Metabolic pathways, Pantothenate and CoA biosynthesis	Unknown
AIO21133.1	capsid protein		2.17		Extracellular
AIO20460.1	coagulase	SACOL0857	2.17		Extracellular
AIO21800.1	chromosome partitioning protein ParA	SA1969	2.16		Cytoplasmic
AIO21846.1	ATP-dependent DNA helicase RecG		2.15		Cytoplasmic
AIO21327.1	adenine phosphoribosyltransferase	apt SA1461	2.15	Metabolic pathways, Purine metabolism	Cytoplasmic
AIO20536.1	argininosuccinate synthase	argG SA0822	2.15	Metabolic pathways, Biosynthesis of secondary metabolites, Biosynthesis of antibiotics, Biosynthesis of amino acids, Alanine, aspartate and glutamate metabolism, Arginine biosynthesis	Cytoplasmic
AIO20205.1	50S ribosomal protein L10	rplJ SA0497	2.15	Ribosome	Cytoplasmic
AIO21502.1	NTPase		2.13		Unknown

AIO19985.1	N-acetylmannosamine-6-phosphate 2-epimerase	nanE SACOL0315	2.13	Amino sugar and nucleotide sugar metabolism	Cytoplasmic
AIO21111.1	lipoprotein	SACOL1528	2.12		Unknown
AIO20869.1	prolyl-tRNA synthetase	proS SA1106	2.12	Aminoacyl-tRNA biosynthesis	Cytoplasmic
AIO21190.1	aldo/keto reductase	SACOL1543	2.11		Cytoplasmic
AIO22278.1	amino acid APC transporter	arcD	2.10		CM
AIO19888.1	coagulase	coa	2.10		Extracellular
AIO20778.1	hypothetical protein KQ76_05635	SA1019	2.09		Unknown
AIO21086.1	3-phosphoshikimate carboxyvinyltransferase	1- aroA SACOL1504	2.09	Metabolic pathways, Biosynthesis of secondary metabolites, Biosynthesis of antibiotics, Biosynthesis of amino acids, Phenylalanine, tyrosine and tryptophan biosynthesis	Cytoplasmic
AIO21153.1	hypothetical protein KQ76_07625	SACOL0347	2.08		Cytoplasmic
AIO20531.1	NADH-dependent flavin oxidoreductase	SACOL0959	2.08		Cytoplasmic
AIO20985.1	LytR family transcriptional regulator	msrR SA1195	2.08		CM
AIO20616.1	glycosyl transferase family 1	SACOL1043	2.08		Cytoplasmic



AIO20898.1	(dimethylallyl)adenosine tRNA methylthiotransferase	miaB SA1134	2.06		Cytoplasmic
AIO22086.1	epimerase	SA2231	2.06		Cytoplasmic
OOC90965.1	glutamine ABC transporter ATP-binding protein	SA1674	2.05		CM
AIO20143.1	thymidylate kinase	tmk SA0440	2.03	Metabolic pathways, Pyrimidine metabolism	Cytoplasmic
AIO20221.1	HAD family hydrolase	SACOL0602	2.02	Metabolic pathways, Biosynthesis of secondary metabolites, Biosynthesis of antibiotics, Glyoxylate and dicarboxylate metabolism	Cytoplasmic
AIO19823.1	UDP-N-acetylglucosamine 2-epimerase	capG	2.02	Metabolic pathways, Amino sugar and nucleotide sugar metabolism	Cytoplasmic
AIO21443.1	hypothetical protein KQ76_09120	SA1573	2.01		Unknown
AIO22323.1	histidinol-phosphate aminotransferase	SACOL2701	2.01	Metabolic pathways, Biosynthesis of secondary metabolites, Biosynthesis of antibiotics, Biosynthesis of amino acids, Phenylalanine, tyrosine and	Cytoplasmic

AIO21737.1	UDP-N-acetylglucosamine carboxyvinyltransferase	1-	murA1 SA1902	murA	2.01	tryptophan biosynthesis, Novobiocin biosynthesis, Tyrosine metabolism, Histidine metabolism, Phenylalanine metabolism Metabolic pathways, Peptidoglycan biosynthesis, Amino sugar and Cytoplasmic nucleotide sugar metabolism
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