LegPrecise	

	ction of Manually Cur	version 4.					gene/regulator
ne	reference regulons	propagated	browse	contact us	help		

Propagation of CodY regulog to Staphylococcus aureus subsp. aureus USA300_FPR3757

Reference regulog properties

Source regulog: <u>CodY - Staphylococcaceae</u>

Regulator type: Transcription factor

Regulator family: CodY
Regulation mode: repressor

Biological process: Amino acid metabolism

Effector: Branched-chain amino acids

Phylum: Firmicutes

Propagated regulon:

Target genome Staphylococcus aureus subsp. aureus

USA300_FPR3757

Orthologous TF(s) SAUSA300_1148

Regulated genes 73



 $Predicted\ regulatory\ interactions\ in\ \textit{Staphylococcus aureus subsp. aureus\ USA 300_FPR 3757}$

	Locus tag	Position	Score	Sequence
	SAUSA300_0012	-314	4.6	AGTAATCAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: metX Ortholog function: homoserine-o-acetyltransferase				
Staphylococcus aureus subsp. aureus N315 Staphylococcus capitis SK14	SA0011 STACA0001_1363	-293 -236	4.6 4.6	AGTAATCAGAAAATT ATTAATTAGAAAATT
Staphylococcus epidermidis ATCC 12228	<u>SE0011</u>	-227 -233 -224	4.6 4.8 4.5	AAAATTCAGACTATT AATAATTAGAAAATT AAAATTTAGACTATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0012	-230 -221	4.8 4	AATAATTAGAAAATT AAAATTATGATATTT
	SAUSA300_0129	-102	4.7	AAATATCTGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>butA</u> Ortholog function: acetoin reductase				
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300	<u>SA0122</u> Sca_0065	-102 -68	4.7 4.6	AAATATCTGAATATT ATTATTCAGAAAATA
Staphylococcus carnosus subsp. carnosus Twisoo	<u>50a_0005</u>	-00	4.0	ATTATICAGAAAATA
	SAUSA300_0135	-102	4.2	AAATTTTATATAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: sodM Ortholog function: superoxide dismutase SodM				
Staphylococcus aureus subsp. aureus N315	SA0128	-102 -41	4.2 4	AAATTTTATATAATT AATTATTATAAAAGT
	SAUSA300_0152	-205 -32	4.1 4.1	ATTTTTTTAAATAAA ATTTTAATGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: capA Ortholog function: capsular polysaccharide synthesis enzyme Cap5	5A			
Staphylococcus aureus subsp. aureus N315	<u>SA0144</u>	-32	4.1	ATTTTAATGAAAATT
	SAUSA300_0160	3	4.2	AGAATTTTAAATATT

	Locus tag	Position	Score	Sequence
Supported by regulated orthologs from reference regulons				
Ortholog gene name: capl	51			
Ortholog function: capsular polysaccharide synthesis enzyme Caps Staphylococcus aureus subsp. aureus N315	SA0152	-32	4.1	ATTTTAATGAAAATT
	SAUSA300_0173	-88	4.8	AATATTTAAAAAAAT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA0165 Ortholog function: hypothetical protein				
Staphylococcus aureus subsp. aureus N315	SA0165	-97	4.2	TTTTATCTAAATATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0460	-88 -99	4.8 4.8	AATATTTAAAAAAAT ATTTATCAGAAAATT
	SAUSA300_0188	-117	5.2	AATTTTCAAAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: brnQ1 Ortholog function: branched-chain amino acid transport system				
Staphylococcus aureus subsp. aureus N315	<u>SA0180</u>	-117	5.2	AATTTTCAAAAAATT
Staphylococcus capitis SK14	STACA0001_0024	-81	4.7	TTTTTTCTGAAAATT
Staphylococcus epidermidis ATCC 12228	SE0217	-173 -81	4.4 4.5	AATATTAAAAATTTT AATTTATTGAATATT
Staphylococcus haemolyticus JCSC1435 Macrococcus caseolyticus JCSC5402	<u>SH0145</u> MCCL_0050	-86	4.5 4.5	AATTTTTTTAATTAAT
Madrococca cascolynous sector	<u>WOOL_0000</u>	-77	4.8	ATTAATCAGAAAATT
	SAUSA300 0306	-85	4.5	ATTTTTCAGATTTTT
		-76	4.5	ATTTTTTAAATTATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>brnQ2</u> Ortholog function: branched-chain amino acid transport system				
Staphylococcus aureus subsp. aureus N315	SA0294	-55	4.5	ATTTTTCAGATTTTT
		-46	4.5	ATTTTTTAAATTATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0418	-53	5	AATATTCAGAAATTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2299	-112	4.3	AATACTTTAAATATT
		-103 -94	4.1 4.5	AATATTATAAATTAT AATTATCTGACATTT
	SAUSA300_0361	-167	5.1	ATTATTCAGAAAATT
	<u>3AUSA3UU_U301</u>	-107	5.1	ATTATTCAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA0348 Ortholog function: putative transcriptional regulator				
Staphylococcus aureus subsp. aureus N315	SA0348	-176	5.1	ATTATTCAGAAAATT
Staphylococcus capitis SK14	STACA0001_1417	-209	4.9	ACTTTTCTGAAAATT
Stanhylococcus anidarmidis ATCC 12229	SE2370	-75 -210	4.8 5.1	AATTTTTAAAATAAT ATTTTTCTGAAAATT
Staphylococcus epidermidis ATCC 12228 Staphylococcus carnosus subsp. carnosus TM300	<u>SE2378</u> <u>Sca_0015</u>	-210 -192	5.1 5.1	AATTTTCAGAATAAT
Japan, Jooddood Garrioodd Gubap, Garrioodd Tiviou	<u>554_5010</u>	-115	4.9	AATTTTTTTGAATTTT
Staphylococcus haemolyticus JCSC1435	SH2634	-279	4.9	ACTTTTCTGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2412	-127	4.6	ACTTATCTGAAAATT
	SAUSA300_0381	-121	4.5	AATATTTTAAAAAGT
Supported by regulated orthologs from reference regulons				

	Locus tag	Position	Score	Sequence
Ortholog gene name: SA0367 Ortholog function: putative NADPH-flavin oxidoreductase				
Staphylococcus aureus subsp. aureus N315	SA0367	-121	4.2	AATATTTTTAAAAGT
Staphylococcus capitis SK14	STACA0001_1449	-145	4.8	AAATATCTGAAAATT
Staphylococcus epidermidis ATCC 12228	<u>SE2355</u>	-114	5.1	AATTATCTGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0041	-140	4.3	AATATTTATATTATT
Staphylococcus haemolyticus JCSC1435	SH2590	-144	4.8	AAATATCTGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SSP2331</u>	-193	4.3	AATAATTTAACTATT
	SAUSA300_0382	-29	4.4	TATATTCAAAAATTT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: tcyP Ortholog function: L-cystine uptake protein tcyP				
Staphylococcus aureus subsp. aureus N315	SA0368	-72	4.3	AATATTTTAAAATTA
		-29	4.4	TATATTCAAAAATTT
Staphylococcus capitis SK14	STACA0001_1450	-133	5.1	ATTATTCAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2329	-138	4.6	AATTATCAGAAAATA
	SAUSA300_0444	-169	4.4	CTTTTTTAGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: gltC Ortholog function: transcription activator of glutamate synthase ope	eron			
Staphylococcus aureus subsp. aureus N315	SA0429	-169	4.4	CTTTTTTAGAATATT
, ,		-160	4.3	AATATTCTGATATTA
Staphylococcus capitis SK14	STACA0001_1493	-179	5	AATTTTCTGACAATT
		-41	4.6	AAATTTTAGAATTTT
Staphylococcus epidermidis ATCC 12228	SE2313	-171	5	AATTTTCTGACAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0104	-113	4.7	AATTTTCAGATTTTT
Staphylococcus haemolyticus JCSC1435	SH2541	-39 -138	4.5 5.4	ATTATTCTAATTATT AATTTTCAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2285	-118	5	AAAATTCTGAAAATT
	SAUSA300_0445	-26	4.4	AATATTCTAAAAAAG
Supported by regulated orthologs from reference regulons				
Ortholog gene name: gltB Ortholog function: glutamate synthase large subunit				
Staphylococcus aureus subsp. aureus N315	SA0430	-35	4.3	TAATATCAGAATATT
· ·		-26	4.4	AATATTCTAAAAAAG
Staphylococcus capitis SK14	STACA0001_1494	-174	4.6	AAAATTCTAAAATTT
		-36	5	AATTGTCAGAAAATT
Staphylococcus epidermidis ATCC 12228	SE2312	-35	5	AATTGTCAGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0105	-117 -43	4.5 4.7	AATAATTAGAATAAT AAAAATCTGAAAATT
Staphylococcus haemolyticus JCSC1435	SH2540	-43 -34	4.7 5.4	AATTTTCTGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2284	-34	5	AATTTTCAGAATTTT
	SAUSA300_0539	-92	5.2	AATTTTTAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: iivE Ortholog function: branched-chain amino acid aminotransferase				
-	SA0512	-92	5.2	AATTTTTAGAAAATT
Staphylococcus aureus subsp. aureus N315 Staphylococcus capitis SK14	SA0512 STACA0001_0476	-92 -101	5.2 4.4	TTTATTTTGAATATT
Cap., y. cococcio capino civit	<u>01/10/10001_04/10</u>	-92	4.7	AATATTTAGAAAACT
Staphylococcus epidermidis ATCC 12228	SE0318	-99	4.1	TCTATTTTGAATATT
		-90	5.2	AATATTTAGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0215	-101	4.5	ATTTTTTTAAATTTT

	Leave ton	Docition	Coore	Coguenos
	Locus tag	Position		Sequence
Stanbulanceura haamalutieura ICCC4.42F	CLI0440	-92	4.8	AATTTTCTAAAAACT
Staphylococcus haemolyticus JCSC1435	SH2449	-91	5.2	AATTTTTAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2163	-86	5.2 4.8	AATTTTTTGAAAATT
Macrococcus caseolyticus JCSC5402	MCCL_1855	-85	4.8	AATTTTCTAAAAACT
	SAUSA300_0632	-178	5	AAAATTCAGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA0601				
Ortholog function: hypothetical protein				
Staphylococcus aureus subsp. aureus N315	SA0601	-400	5	AAAATTCAGAATATT
		-391	4.1	AATATTTTTAATTAT
Staphylococcus capitis SK14	STACA0001_0382	-211	5	AAAATTCAGAATATT
Staphylococcus epidermidis ATCC 12228	SE0420	-206	5	AAAATTCAGAATATT
		-197	4.1	AATATTTAAATTTAT
Staphylococcus carnosus subsp. carnosus TM300	Sca 0294	-120	4.8	AATTTTCAGAATTAT
Staphylococcus haemolyticus JCSC1435	SH2248	-172	5	AAAATTCAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2074	-166	4.8	AAATTTCAGAATTTT
	041104000 0057	405		
	SAUSA300_0657	-195	4.5	ATATTTTTGAAAAAT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA0626 Ortholog function: hypothetical protein				
	640000	405	4.5	7 TI 7 TITTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
Staphylococcus aureus subsp. aureus N315	SA0626	-195	4.5	ATATTTTTGAAAAAT
Staphylococcus capitis SK14	STACA0001_0358	-200	4.6	ATTAATTAGAAAATT
		-142	4.3	AATTTTAAGTAAATT
		-98	4.2	ATAATTTTGAAAATA
Staphylococcus haemolyticus JCSC1435	SH2222	-200	4.1	TTTATTTAGAATTTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP2051	-191 -190	4.6 5.1	AATTTTCAGATAATA AATTTTCAGAAAAAT
	SAUSA300_0712	-112	4.6	AATATTCTCAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: tppB Ortholog function: di-tripepride ABC transporter				
Staphylococcus aureus subsp. aureus N315	SA0682	-112	4.6	<u> እ </u>
otaphyrococous aureus subsp. aureus No 10	<u>SA0682</u>	-112 -103	4.6 4.1	AATATTCTCAATATT AATATTTTTATTTT
Staphylococcus capitis SK14	STACA0001_0301	-103	4.3	AATTGACTGAATATT
Otaphylococcus capitis Six14	<u>31ACA0001_0301</u>	-115	4.5	AATATTCATATTATT
		-98	4.8	TATTTTTTGAAAATT
Staphylococcus epidermidis ATCC 12228	SE0509	-107	4	CTTTTTTTTAAATTTT
otaphylococcus epidennidis ATOO 12220	<u>3L0303</u>	-98	5.2	AATTTTTTGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca 0374	-90 -114	5.2	AATITTTTGAAAATT
Ocaphylococous carriosus subsp. carriosus 1191000	<u>000 0014</u>	-114 -88	5.5 4.5	TATTTTAAGAAAATT
Staphylococcus haemolyticus JCSC1435	SH2166	-00 -102	4.5 5	AAATTTCTAAAAATT
Staphylococcus naemolyticus 3030 1435 Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1991	-102	5 4.1	AAATTAACAGAATATT
Otaphylococcus saprophyticus subsp. saprophyticus ATOC 15505	<u>001 1001</u>	-110	4.1	AATATTCTCAATATT
Macrococcus caseolyticus JCSC5402	MCCL_0478	-117	4.6	AACTTTTTGAAAATT
Macrococcus casedly ficus 30000402	<u>MOOL_0476</u>	-36	5.3	AATTTTCAGAATATT
	SAUSA300_0784	-41	4.6	TTTTTTCAGAATATT
	<u>5/100/1000_0/04</u>	TI	7.0	
Supported by regulated orthologs from reference regulons				
Ortholog gene name: lysE Ortholog function: lysine exporter protein				
- · · · · · ·				
	SA0753	-41	4.6	TTTTTTCAGAATATT
Staphylococcus aureus subsp. aureus N315 Staphylococcus capitis SK14	SA0753 STACA0001_0229	-41 -43	4.6 4.7	TTTTTTCAGAATATT AATTATCAGAATTTT

	Locus tag	Position -51	Score 4.3	Sequence AATTTTCAGATTTTA
	SAUSA300_0864	-32	4.6	AATATTCAGATAACT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: argG Ortholog function: argininosuccinate synthase				
Staphylococcus aureus subsp. aureus N315	<u>SA0822</u>	-32	4.6	AATATTCAGATAACT
Staphylococcus capitis SK14	STACA0001_0165	-33	5	AAAATTCTGAAAATT
Staphylococcus epidermidis ATCC 12228	SE0657	-180	4.5	AATTTACAGAAATT
		-171	4.3	AAATTTTAAAATAT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0569	-33 -31	4.5 5.1	AAAATTCTAACTATT AATTTTCAGAAAAA
Staphylococcus haemolyticus JCSC1435	<u>SH1989</u>	-31	5.1	AATTTTCAGAAAAAT
	SAUSA300_0887	-66	4.7	AGATTTCAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: oppB Ortholog function: oligopeptide ABC transporter permease protein	ОррВ			
Staphylococcus aureus subsp. aureus N315	SA0845	-66	4.7	AGATTTCAGAAAAT
Staphylococcus capitis SK14	STACA0001 0146	-36	4.2	AATATACATAATAT
outpriyioooodaa aapina erri i	<u> </u>	-27	4.6	AATATTCTGAAAAA
Staphylococcus epidermidis ATCC 12228	SE0680	-63	4.9	ATATTTCTGAAAAT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0588	-113	5.2	AATATTCTAAAAAT
		-65	4.2	AATATTAAAATATT
		-56	4.9	ATATTTCTGAAAAT
Staphylococcus haemolyticus JCSC1435	SH1970	-116	4.7	AATTTTGTGAAAAT
		-60	4.9	ATATTTCTGAAAAT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1794	-56	4.8	ATATTTCTGAATAT
Macrococcus caseolyticus JCSC5402	MCCL_0605	-186	4.8	AATTTTTAAAAAAA
		-132	4.8	AATCTTCTGAAAATT
	SAUSA300_0892	-84	4.7	AATATTCTAAAAATA
Supported by regulated orthologs from reference regulons				
Ortholog gene name: appA Ortholog function: oligopeptide transport system oligopeptide-bindi	na protein AppA			
			4.4	AAATAACTGAATAT
	SA0850	-0.3		
Staphylococcus aureus subsp. aureus N315	<u>SA0850</u>	-93 -84	4.1 4.7	
Staphylococcus aureus subsp. aureus N315	Sca_0936	-93 -84 -65	4.1 4.7 4.6	AATATTCTAAAAATA
Staphylococcus aureus subsp. aureus N315		-84	4.7	AATATTCTAAAAATA AATAGTCAGACAATT
	Sca_0936	-84 -65	4.7 4.6	AATATTCTAAAAATA AATAGTCAGACAATT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871	Sca_0936	-84 -65	4.7 4.6	AATATTCTAAAAATA AATAGTCAGACAAT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog	Sca_0936 SAUSA300_0914	-84 -65 -78	4.7 4.6	AATATTCTAAAAATAAAATAAATAATAATCTGAAAAAATAATTCTGAAAAAAT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog	Sca_0936	-84 -65 -78	4.7 4.6 5.1	AATATTCTAAAAATAAATAATAATAATAATCTGAAAAAATAATTCTGAAAAAATATTTATAAGAATATT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog Staphylococcus aureus subsp. aureus N315	Sca_0936 SAUSA300_0914 SA0871	-84 -65 -78 -150 -141	4.7 4.6 5.1 4.3 5.1	AATATTCTAAAAAT AATATTCTGAAAAAT AATATTCTGAAAAAT ATTTATAAGAATAT AATATTCTGAAAAAT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog Staphylococcus aureus subsp. aureus N315	Sca_0936 SAUSA300_0914	-84 -65 -78 -150 -141 -150	4.7 4.6 5.1 4.3 5.1 4.3	AATATTCTAAAAATAAATAATATTCTGAAAAAATATTTATAAGAATATTATAAGAATATAATATTCTGAAAAAAAA
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog Staphylococcus aureus subsp. aureus N315 Staphylococcus aureus subsp. aureus N315	Sca_0936 SAUSA300_0914 SA0871 SA0871	-84 -65 -78 -150 -141 -150 -141	4.7 4.6 5.1 4.3 5.1 4.3 5.1	AATATTCTAAAAATAAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTATAAGAATATTATATAAGAATATTATATAAGAATATTAT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog Staphylococcus aureus subsp. aureus N315 Staphylococcus aureus subsp. aureus N315 Macrococcus caseolyticus JCSC5402	Sca_0936 SAUSA300_0914 SA0871 SA0871 MCCL_0082	-84 -65 -78 -150 -141 -150 -141 -101	4.7 4.6 5.1 4.3 5.1 4.3 5.1 4.7	AATATTCTAAAAATAAATAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTATAAGAATATTATAAGAATATTATATATCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAATATATTCAGAATTAT
Staphylococcus aureus subsp. aureus N315 Staphylococcus carnosus subsp. carnosus TM300 Supported by regulated orthologs from reference regulons Ortholog gene name: SA0871 Ortholog function: sodium-alanine symporter homolog Staphylococcus aureus subsp. aureus N315 Staphylococcus aureus subsp. aureus N315	Sca_0936 SAUSA300_0914 SA0871 SA0871	-84 -65 -78 -150 -141 -150 -141	4.7 4.6 5.1 4.3 5.1 4.3 5.1	AATATTCTAAAAATAAATAATATTCTGAAAAATATTCTGAAAAATATTCTGAAAAAATATTATAAGAATATTATAAGAATATTATAAGAATATTAT

Supported by regulated orthologs from reference regulons

Ortholog gene name: $\underline{\mathsf{comK}}$

Ortholog function: competence transcription factor

	Locus tag	Position	Score	Sequence
Staphylococcus aureus subsp. aureus N315	SA0882	-147	4.9	AATATTCTGACTATT
Staphylococcus capitis SK14	STACA0001_0106	-151	4.7	AATATTCTGACATTT
Staphylococcus epidermidis ATCC 12228	SE0731	-147	4.7	AATATTCTGACATTT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0642	-145	4.6	AATATTCTGACTTTT
		-136	4.1	ACTTTTTAAAAAATA
Staphylococcus haemolyticus JCSC1435	SH1926	-148	4.6	AATATTCTGACTTTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1755	-186	4.6	AATATTCAGACTTTT
		-92	4.5	AAATTTATAAAAATT
Macrococcus caseolyticus JCSC5402	MCCL 1546	-195	4.8	ATAATTCTGAAAATT
		-186	4.4	AAAATTTAAATTATT
		-86	4.7	AAATTTCTTAAAATT
	SAUSA300_0929	-77	4.9	AATAGTCAGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA0883				
Ortholog function: hypothetical protein	040055			3 3 m3 0m2 3 2
Staphylococcus aureus subsp. aureus N315	SA0883	-77	4.9	AATAGTCAGAATATT
Staphylococcus capitis SK14	STACA0001_0107	-83	4.7	AAATGTCAGAATATT
Staphylococcus epidermidis ATCC 12228	<u>SE0729</u>	-82	4.7	AAATGTCAGAATATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0643	-178	4.2	AATTATAAAAATAAT
		-91	4.1	TATTTTTTAAAAAGT
		-82	4.6	AAAAGTCAGAATATT
Staphylococcus haemolyticus JCSC1435	SH1925	-80	4.6	AAAAGTCAGAATATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1756	-174	4.5	AATTTTTATAAATTT
		-80	4.6	AAAAGTCTGAATATT
	041104000 0050	F0	4.0	
	SAUSA300_0952	-50	4.2	TAATTTCTAAATTTT
		-41	4.4	AATTTTTAGACAATA
		19	4.1	CTAATTCTAAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: patA Ortholog function: putative aminotransferase A				
Staphylococcus aureus subsp. aureus N315	SA0902	-50	4.2	TAATTTCTAAATTTT
		-41	4.4	AATTTTTAGACAATA
Staphylococcus capitis SK14	STACA0001_2317	-58	4.1	ACTATTTTAACAATT
Staphylococcus epidermidis ATCC 12228	SE0747	-59	4.1	ACTATTTAAACAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0656	-108	4.2	TTTATTCTAAAATTT
Staphylococcus haemolyticus JCSC1435	SH1916	-65	4.9	ATTATTCTAAAAATT
Macrococcus caseolyticus JCSC5402	MCCL 1585	-86	4.3	AATGTTCTAATAATT
	SAUSA300_1014	-109	4.4	TAAATTTTGAAAATT
		-41	4.6	ATTAGTTAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: pycA Ortholog function: pyruvate carboxylase				
Staphylococcus aureus subsp. aureus N315	SA0963	-41	4.6	ATTAGTTAGAAAATT
Staphylococcus capitis SK14	STACA0001_2249	-42	4.6	ATTAGTTAGAAAATT
A	<u> </u>	-33	4.4	AAAATTCAAAAAATA
Staphylococcus epidermidis ATCC 12228	SE0813	-40	4.1	TATTATCTAATTATT
		-31	4.9	ATTATTTAGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0740	-34	4.6	AAAATTCAAATAATT
Staphylococcus haemolyticus JCSC1435	SH1838	-41	4.5	ATTAGTTAGAATATT
	5555	-32	4.5	AATATTCAAACTTTA
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1675	-32 -38	4 4.7	ACTTTTTAGAAAATT
otaphylococcus saprophyticus subsp. saprophyticus ATOC 15305	<u>SSP1675</u>	-38 -29	4.7 4.1	AAAATTCAAAATTTA
		-29	4.1	ANANI I CAMAMI I I M
	SAUSA300_1200	-187	4.4	ATTTATCAGATTATT
		-178	4.2	ATTATTTTTAAAAAT

	Locus tag	Position	Score	Sequence
Supported by regulated orthologs from reference regulons				
Ortholog gene name: glnR Ortholog function: HTH-type transcriptional regulator GlnR				
Staphylococcus aureus subsp. aureus N315	<u>SA1149</u>	-187	4.4	ATTTATCAGATTATT
Staphylococcus capitis SK14	STACA0001_1553	-178 -202	4.2 4.3	ATTATTTTTAAAAAT TTTTGTCAGAAAATT
		-191	4.1	AATTATAAAATTATT
		-150	4.2	ATTAATTAAAAATTT
Staphylococcus epidermidis ATCC 12228	<u>SE0986</u>	-194 -185	4.8 4.7	AAATGTCTGAAAATT AAAATTTTAAAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0958	-165 -157	4.8	AATTTACAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1452	-179	4.2	ATTTTTTTGAATAAA
		-157	4.9	AATTTTCTAATAATT
		-56	4.4	ATTAATCTGATTATT
	SAUSA300_1225	-87	4.6	AATATTCAAAATATA
		-35	4.7	AATTTTCTGATTTT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>thrA</u> Ortholog function: aspartokinase III				
Staphylococcus aureus subsp. aureus N315	SA1163	-87	4.6	AATATTCAAAATATA
		-35	4.7	AATTTTCTGATTTTT
Staphylococcus capitis SK14	STACA0001_1570	-33	4.7	AATTTTCTGATTTTT
Staphylococcus epidermidis ATCC 12228 Staphylococcus carnosus subsp. carnosus TM300	<u>SE1008</u> Sca_0969	-33 -97	4.7 4.4	AATTTTCTGATTTTT AAAGTTCAAAAAATT
Staphylococcus carnosus subsp. carnosus Twood	<u>30a_0303</u>	-79	4.2	AATATGTTGAAATTT
Staphylococcus haemolyticus JCSC1435	SH1580	-35	4.7	AATTTTCTGATTTTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1439	-35	4.7	AATTTTCTGATTTT
	SAUSA300_1226	-170 -118	4.7 4.6	AAAAATCAGAAAATT TATATTTTGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: hom Ortholog function: homoserine dehydrogenase				
Staphylococcus aureus subsp. aureus N315	SA1164	-170	4.7	AAAAATCAGAAAATT
		-118	4.6	TATATTTTGAATATT
Staphylococcus capitis SK14	STACA0001_1571	-170	4.7	AAAAATCAGAAAATT
Staphylococcus epidermidis ATCC 12228	SE1009	-91 -170	4.3 4.7	AAAATTAAGAATAAT AAAAATCAGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0970	-127	4.2	AAATTTCAACATATT
		-109	4.4	AATTTTTTGAACTTT
Staphylococcus haemolyticus JCSC1435	SH1579	-178	4.7	AAAAATCAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SSP1438</u>	-168	4.7	AAAAATCAGAAAATT
	SAUSA300_1231	-110	4.7	AAAAATCAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: rocC Ortholog function: amino acid permease				
Staphylococcus aureus subsp. aureus N315	SA1169	-110	4.7	AAAAATCAGAAAATT
		-101	4.1	AAAATTTTAATTTTT
Staphylococcus capitis SK14	STACA0001_1576	-112	5.1	AAATTTCAGAAAATT
Staphylococcus epidermidis ATCC 12228	<u>SE1015</u>	-102 -112	4.7 4.6	AAATTTTTAAATATT AAATATCAGAAAAAT
		-103	4.1	AAAAATTTAACAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_0975	-121	4.3	TTTTTTCAGAATTTT
Olerahyda a sawa hasayah (f. 1990) (195	014574	-112	4.7	AATTTTTTAAATTTT
Staphylococcus haemolyticus JCSC1435	<u>SH1574</u>	-114	5.1	AAATTTCAGAAAATT

	Locus tag	Position	Score	Sequence
		-105	4.4	AAAATTTAAAATTTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1433	-111	4.4	AATATTTAAACATTT
Macrococcus caseolyticus JCSC5402	MCCL_0990	-56	4.4	AATTTTCTTAATTAT
	SAUSA300_1232	-117	4.1	AAAAATTAAAATTTT
		-108	4.7	AATTTTCTGATTTTT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: katA Ortholog function: catalase				
Staphylococcus aureus subsp. aureus N315	SA1170	-111	4.1	AAAAATTAAAATTTT
		-102	4.7	AATTTTCTGATTTTT
Staphylococcus capitis SK14	STACA0001_1577	-131	4.7	AATATTTAAAAATTT
		-121	5.1	AATTTTCTGAAATTT
Staphylococcus epidermidis ATCC 12228	SE1016	-142	4.1	AATTGTTAAATTTTT
		-133	4.6	ATTTTTCTGATATTT
Staphylococcus carnosus subsp. carnosus TM300	Sca_2336	-28	4.1	ATTATTCTAAATAAG
Staphylococcus haemolyticus JCSC1435	<u>SH1573</u>	-123	4.4	AAAATTTTAAATTTT
		-114	5.1	AATTTTCTGAAATTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SSP1432</u>	-129	4.4	AAATGTTTAAATATT
	SAUSA300_1260	-34	5.1	ATTATTCTGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: tyrA Ortholog function: prephenate dehydrogenase				
Staphylococcus aureus subsp. aureus N315	SA1197	-34	5.1	ATTATTCTGAAAATT
Staphylococcus capitis SK14	STACA0001_1611	-35	4.8	ACTATTCTGAAAATT
Staphylococcus epidermidis ATCC 12228	SE1047	-251	4.4	AATTATCTGATTTT
		-242	4.6	ATTTTTCTAATTATT
		-35	4.4	GTTATTCTGAAAATT
Staphylococcus haemolyticus JCSC1435	SH1544	-35	4.8	CATATTCTGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1387	-36	4.8	ACTATTCTGAAAATT
	SAUSA300_1262	-96	4.5	AATATTTCGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: trpE Ortholog function: anthranilate synthase component I				
	SA1100	. 420	ΛF	እ እጥን እጥጥ» ለ » » ሙሙሙ
Staphylococcus aureus subsp. aureus N315 Staphylococcus capitis SK14	SA1199 STACA0001 1613	-439 -438	4.5 4.6	AATAATTAGAATTTT AATAATTAGAAAAAT
Staphylococcus capitis SK14	31ACA0001_1613	-436 -429	4.6	AAAAATCAGATAATT
Staphylococcus epidermidis ATCC 12228	SE1048	-431	4.6	AATAATTAGAAAAAT
Staphylococcus epidennidis ATOO 12220	<u>3L 1040</u>	-422	4.4	AAAAATCAGATAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_1012	-464	4.3	CATTATTAAAAAATT
Staphylococcus haemolyticus JCSC1435	SH1542	-453	4.3	AAATATCAAACAATT
	CALICA200 4000	240	4.4	
	SAUSA300_1286	-342 -324	4.4 4	AATTTTCAGGTTATT AAAAATCTAAATTAT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: lysC Ortholog function: aspartokinase II				
Staphylococcus carnosus subsp. carnosus TM300	Sca_1037	-340	4.3	AAATTTCTAAAAATC
Staphylococcus haemolyticus JCSC1435	SH1518	-344	4.1	ATTTTTCAGTCTATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1357	-350	4.5	ATTTTTCAGTAAATT
		-341	4.3	TAAATTTAAAAAATT

	Locus tag	Position	Score	Sequence
Supported by regulated orthologs from reference regulons				
Ortholog gene name: asd Ortholog function: aspartate semialdehyde dehydrogenase				
Staphylococcus aureus subsp. aureus N315	SA1226	-45	5.2	AATATTCTAAAAATT
Staphylococcus capitis SK14	STACA0001_1640	-44	5	AATTTTCTTAAAATT
Staphylococcus epidermidis ATCC 12228	<u>SE1074</u>	-46	5.2	AATTTTCTAAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_1038	-340 -42	4.3 4.8	AAATTTCTAAAAATC AATTTTTTTAAAATT
Staphylococcus haemolyticus JCSC1435	<u>SH1517</u>	-42	4.0	AAAATTCAAACAAAT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1356	-350	4.5	ATTTTTCAGTAAATT
		-341	4.3	TAAATTTAAAAAATT
	SAUSA300_1330	-64	4.5	AATATTTTAAATATA
Supported by regulated orthologs from reference regulons				
Ortholog gene name: tcdB Ortholog function: threonine dehydratase				
Staphylococcus aureus subsp. aureus N315	<u>SA1271</u>	-64	4.5	AATATTTTAAATATA
	SAUSA300 1354	-101	4	AAAAACTAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA1296 Ortholog function: hypothetical protein				
Staphylococcus aureus subsp. aureus N315	SA1296	-150	4.6	AATATTAAGATAATT
		-141	4.2	ATAATTCTGACATTT
Staphylococcus epidermidis ATCC 12228	<u>SE1152</u>	-138 -124	4	TCTTTTTTAAATATT
Staphylococcus haemolyticus JCSC1435	<u>SH1449</u>	-115	4.7 4.6	AATTATTAAAATATT AATATTCTAATAAAT
	SAUSA300 1357	-150	4.6	AATATTAAGATAATT
		-141	4.2	ATAATTCTGACATTT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: aroC Ortholog function: chorismate synthase				
Staphylococcus aureus subsp. aureus N315	SA1299	-150	4.6	AATATTAAGATAATT
		-141	4.2	ATAATTCTGACATTT
Staphylococcus epidermidis ATCC 12228	<u>SE1155</u>	-138	4	TCTTTTTTAAATATT
Staphylococcus haemolyticus JCSC1435	SH1446	-124 -115	4.7 4.6	AATTATTAAAATATT AATATTCTAATAAAT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1278	-113	4.6	ATTTTTATGAATATT
	SAUSA300_1494	-106	4.8	AATTATCAAAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>SA1363</u> Ortholog function: Lipoate-protein ligase A				
Staphylococcus aureus subsp. aureus N315	<u>SA1363</u>	-106	4.8	AATTATCAAAATATT
Staphylococcus capitis SK14	STACA0001_1770	-109	4.6	ATTTATCAAAATATT
Staphylococcus epidermidis ATCC 12228	SE1217	-108 100	4.6	ATTTATCAAAATATT
Staphylococcus haemolyticus JCSC1435 Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SH1383</u> SSP1222	-100 -121	4.3 4.6	ATTTATCAAAATTTT ATTTATCAAAATATT
Supply to the supply t	<u> </u>	121	7.0	
	SAUSA300 1495	-66	4.8	AATATTTTGATAATT

	Locus tag	Position	Score	Sequence
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA1364				
Ortholog function: putative sulfurtransferase				
Staphylococcus aureus subsp. aureus N315	<u>SA1364</u>	-66	4.8	AATATTTTGATAATT
Staphylococcus capitis SK14	STACA0001_1771	-66	4.6	AATATTTTGATAAAT
Staphylococcus epidermidis ATCC 12228 Staphylococcus haemolyticus JCSC1435	<u>SE1218</u> SH1382	-66 -66	4.6 4.3	AATATTTTGATAAAT AAAATTTTGATAAAT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1221	-67	4.6	AATATTTTGATAAAT
	SAUSA300_1513	-140	4.1	AAATGTTTAATTATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: sodA Ortholog function: superoxide dismutase SodA				
	SA1382	-140	4.1	AAATGTTTAATTATT
Staphylococcus aureus subsp. aureus N315 Staphylococcus capitis SK14	STACA0001_1791	-219	4.3	TATTTTCAAAAAACT
Chapity is a suprise of the	<u> </u>	-184	4.2	AATGGTCTGAAAAAT
Staphylococcus epidermidis ATCC 12228	SE1240	-101	4.4	AATAATTTAATAATT
Staphylococcus haemolyticus JCSC1435	SH1363	-248	4.3	AATTATTTAAAAATA
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1203	-182	4.2	AATTTTTAAAATTGT
	SAUSA300_1669	-54	5.4	AATTTTCAGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA1544				
Ortholog function: putative phosphoserine transaminase				
Staphylococcus aureus subsp. aureus N315	SA1544	-54	5.4	AATTTTCAGAAAATT
Staphylococcus capitis SK14	STACA0001_0615	-53	5.2	AATATTCAGAATATT
Staphylococcus epidermidis ATCC 12228	<u>SE1400</u>	-54	5	AATATTCAGAATTTT
Staphylococcus carnosus subsp. carnosus TM300 Staphylococcus haemolyticus JCSC1435	<u>Sca_1329</u> SH1201	-55 -55	4.9 5	TATTTTCAGAATATT AATTATCAGAATATT
Staphylococcus raemoyalcus 3050 1433 Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1040	-55 -55	4.9	TATTTTCTGAAAATT
	SAUSA300_1679	-127	4.3	ATTATATAGAAAATT
		-78	4.6	AAAATTTTGAATAAT
		-69	4.1	AATAATTAGAAATGT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: acsA Ortholog function: acetyl-CoA synthetase				
Staphylococcus aureus subsp. aureus N315	<u>SA1554</u>	-78	4.6	AAAATTTTGAATAAT
		-69	4.1	AATAATTAGAAATGT
Staphylococcus capitis SK14	STACA0001_0626	-78	4.3	AGATTTTTGAAAAAT
Staphylococcus carnosus subsp. carnosus TM300	Sca_1338	-96	4.2	AAAAATCAGAATTAT
		-87	4.1	AATTATCATAATTAT
Staphylococcus haemolyticus JCSC1435	SH1189	-87	4.9	AATTATCTAAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305 Macrococcus caseolyticus JCSC5402	SSP1030 MCCL_1409	-75 -48	4.9 4.5	ATTATTTTGAAAATT TATATTTTGAAAAAT
Interococcus cascoryticus 90000-102	<u>MOOL_1403</u>		7.0	
	SAUSA300_1680	-114	4.1	ACATTTCTAATTATT
		-105	4.6	ATTATTCAAAATTTT
		-56	4.3	AATTTTCTATATAAT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: acuA Ortholog function: hypothetical protein				
Staphylococcus aureus subsp. aureus N315	<u>SA1555</u>	-114	4.1	ACATTTCTAATTATT
		-105	4.6	ATTATTCAAAATTTT

Otrabula a como a selida OKAA	Locus tag	Position -56	4.3	Sequence AATTTCTATATAAT
Staphylococcus capitis SK14 Staphylococcus carnosus subsp. carnosus TM300	STACA0001_0627 Sca_1339	-110 -159 -150	4.3 4.1 4.2	ATTTTTCAAAAATCT ATAATTATGATAATT ATAATTCTGATTTTT
Staphylococcus haemolyticus JCSC1435	SH1188	-92	4.9	AATTTTTAGATAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305 Macrococcus caseolyticus JCSC5402	SSP1029 MCCL_1410	-119 -39	4.9 4.5	AATTTTCAAAATAAT ATTTTTCAAAATATA
	SAUSA300_1808	-35	4.3	ATAATTATGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: artQ Ortholog function: Arginine ABC transport system ArtQ				
Staphylococcus aureus subsp. aureus N315	<u>SA1675</u>	-167	4.3	ATAATTATGAATATT
Staphylococcus capitis SK14	STACA0001_0720	6	4.2	AAAATTATTAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_1432	-83 -74	5.1 4	AAATTTCAGAAAATT AAAATTTAAAAATTA
Staphylococcus haemolyticus JCSC1435	SH1104	-72	4	CTTTTTTAAAATTTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0937	-63	4.2	ATTATATTGAATATT
Macrococcus caseolyticus JCSC5402	MCCL_1584	-87	4.3	AATTATTAGAACATT
	SAUSA300_1918	-318	4.4	AATTAACTGAATATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: hlb Ortholog function: truncated beta-hemolysin				
Staphylococcus aureus subsp. aureus N315	<u>SA1752</u>	-315	4.4	AATTAACTGAATATT
	SAUSA300_1989	4	4.2	ATTATTTTGATAATA
Supported by regulated orthologs from reference regulons				
Ortholog gene name: agrB Ortholog function: accessory gene regulator B				
Staphylococcus aureus subsp. aureus N315 Staphylococcus haemolyticus JCSC1435	SA1842 SH0996	-261 -124	4.6 4.1	AAAATTCTTAAAATT ATATGTTAAAATATT
	SAUSA300_1996	-38	4.6	AATTGTCAGATTATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: nrgA Ortholog function: ammonium transporter				
Staphylococcus aureus subsp. aureus N315	<u>SA1848</u>	-38	4.6	AATTGTCAGATTATT
	SAUSA300_2006	-301	4.9	AATTTTTAGACAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>ilvD</u> Ortholog function: dihydroxy-acid dehydratase				
Staphylococcus aureus subsp. aureus N315	<u>SA1858</u>	-301 -53	4.9 4.5	AATTTTTAGACAATT ATATTTCAGAATTTT
Staphylococcus capitis SK14	STACA0001_0526	-327	4.9	AATTGTTAGAAAATT
Staphylococcus epidermidis ATCC 12228	<u>SE1654</u>	-330	5.2	AATTTTTAGAAAATT
Stanhylococcus carnosus subsp. carnosus TM200	Sca 1550	-321 -316	4.1 4.8	AAAATTCTAAATTTA AATTTTAAAAAAATT
Staphylococcus carnosus subsp. carnosus TM300	<u>Sca_1559</u>	-316 -307	4.8	AAAATTCTAATAAAT
Staphylococcus haemolyticus JCSC1435	SH0980	-321	4.4	AGTTGTTAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0825	-323	4.2	AATTGACAGAAAAAT
		-266	4	ATTTATCAAATTTTT

Macrococcus caseolyticus JCSC5402	Locus tag	Position -258	Score 4.7	Sequence AATTTTTAGATATTT ATATTTCAAACAAAT AATTTTTAGAAAAATT
		-249	4.1	
	MCCL_0860	-266	5.2	
		-257	4.7	AAAATTTTAAATATT
	SAUSA300_2087	-143	4.5	AGTTATTAGAAAATT
Supported by regulated orthologs from reference regulons Ortholog gene name: hmrA				
Ortholog function: N-acyl-L-amino acid amidohydrolase				
Staphylococcus aureus subsp. aureus N315	<u>SA1935</u>	-143	4.5	AGTTATTAGAAAATT
Staphylococcus capitis SK14	STACA0001_0837	-235	4.6	AATTGTAAGAAAATT
Staphylococcus epidermidis ATCC 12228	<u>SE1731</u>	-113	4.6	AATTGTAAGAAAATT
		-102	4.2	AATTGTGTAAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_1636	-176	4.1	AATTTATTAAATTTT
Staphylococcus haemolyticus JCSC1435	SH0902	-179	4.7	AATTTTCAAAATTAT
		-52	4.5	AATATCCAAAATATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SSP0752</u>	-190	4.1	TATTTTTATAAATTT
		-181	4.6	AAATTTCAGAAAATG
	SAUSA300_2160	-220	5.2	AATTTTCAAAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA2002 Ortholog function: hypothetical regulator				
Staphylococcus aureus subsp. aureus N315	SA2002	-220	5.1	AATTTTTAAAAAATT
Staphylococcus haemolyticus JCSC1435	SH0156	-76	4.8	AATTTTTAAAAATTT
	<u>5.10.100</u>	-51	4.2	AAATTTTTAAATTAT
	SAUSA300_2265	-263	4.4	AATATTATTAAAATT
	<u>0/100/1300_2203</u>	-183	4.7	ATTTTTTAGAAAAAT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA2109 Ortholog function: probable amino-acid or metabolite transporter				
	\$42100	-102	17	እ ተኮተኮተኮተኮተ እ <i>ለ</i> እ እ እ አ ካ
Staphylococcus aureus subsp. aureus N315	SA2109 STACA0001 1171	-183 -181	4.7 5.1	ATTTTTTAGAAAAAT AATTTTCAGAAAAAT
Staphylococcus capitis SK14	STACA0001_1171	-181 -101	5.1 4.1	
Stanbulaceacus anidarmidia ATCC 12229	SE1892	-101 -98	4.1	AATTGTAAAAATTTT AATTGTAAAAATATT
Staphylococcus epidermidis ATCC 12228 Staphylococcus carnosus subsp. carnosus TM300	Sca_1812	- 9 6	4.4	ATTATACTGAAAATT
Staphylococcus carriosus subsp. carriosus Tivisoo	<u>30a_1012</u>	-408 -414	4.4	ATTATACTGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0591	-88	4.4	AATTGTTTAAATTT
oraphylococcus saprophylicus sausp. saprophylicus ATOO 1990	<u>331 039 1</u>	-79	4.4	AATTTTTTGAATTT
	SAUSA300_2268	-78	4.9	AATTTTCAGAAAAGT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: yocS Ortholog function: Uncharacterized sodium-dependent transporter	yocS			
Staphylococcus aureus subsp. aureus N315	SA2112	-87	4.2	AATAATCTTAATTTI
olaphyrocoodd ddiodd ddbap, ddiodd 11010	<u>JACTIC</u>	-07 -78	4.9	AATTTTCAGAAAAGT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0585	-76 -90	4.5	AAAAATTAGAATATT
Capity 10000000 Supropriy Ilous Subsp. Supropriy Ilous ATOO 13303	<u>00: 0000</u>	-90 -81	5.2	AATATTTAGAAAATT

Supported by regulated orthologs from reference regulons

Ortholog gene name: aapA

	Locus tag	Position	Score	Sequence
Ortholog function: D-serine/D-alanine/glycine transporter	_			•
Staphylococcus aureus subsp. aureus N315	SA2226	-108	4.3	TATATTTAAAAAAAT
Staphylococcus aureus subsp. aureus N315	SA2227	-108	4.3	TATATTTAAAAAAAT
Staphylococcus capitis SK14	STACA0001_1050	-166	4.8	AATTTTTTGATTATT
		-157	4.7	ATTATTCTAAAAAAT
Staphylococcus epidermidis ATCC 12228	SE2004	-93	4.9	ATATTTCTGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_1918	-126	4.6	AATTTTCTTATAATT
Staphylococcus haemolyticus JCSC1435	SH0623	-231	5.1	AATTTTCAGAAATTT
	SAUSA300_2389	-85	4.7	AATTTTCTGCAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: SA2233 Ortholog function: integral membrane efflux protein				
Staphylococcus aureus subsp. aureus N315	SA2233	-85	4.7	AATTTTCTGCAAATT
Staphylococcus capitis SK14	STACA0001_1042	-252	5.2	AATTTTCTGCAAATT
Staphylococcus epidermidis ATCC 12228	SE2010	-232 -246	5.2	AATTTTCTAAAAATT
Staphylococcus epidermiais ATCC 12226	<u>3E2010</u>	-240	5.2	AATTICTAAAAATT
	SAUSA300_2393	-82	4.1	ATTTGTTTAACAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: opuCA Ortholog function: glycine betaine/carnitine/choline ABC transporte	r onuCA			
	·	70		3 mmm (mmm; 3 2 2 3 5 ==
Staphylococcus aureus subsp. aureus N315	SA2237	-76	4.1	ATTTGTTTAACAATT
Staphylococcus epidermidis ATCC 12228	SE0222	-43	4	TATTTTTTAACAAAT
Staphylococcus carnosus subsp. carnosus TM300	<u>Sca_1934</u>	-517	4.7	ATTTGTCTGAATATT
	SAUSA300_2416	-271	4.9	AATTTTCAGAAAATA
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>SA2260</u> Ortholog function: putative short chain dehydrogenase				
Staphylococcus aureus subsp. aureus N315	SA2260	-174	4.9	AATTTTCAGAAAATG
Staphylococcus capitis SK14	STACA0001 1022	-218	5.1	AATTTTCTGAAATTT
Staphylococcus epidermidis ATCC 12228	SE2032	-218	4.6	ATTTTTCTGAAATAT
Staphylococcus haemolyticus JCSC1435	SH0590	-209	5.1	AATTTTCAGAAATTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0436	-165	4.9	AATATTCTGAAAATA
	SAUSA300_2417	-75	4.9	TATTTTCTGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>SA2261</u> Ortholog function: putative p-aminobenzoyl-glutamate transporter				
Staphylococcus aureus subsp. aureus N315	SA2261	-75	4.9	CATTTTCTGAAAATT
Staphylococcus capitis SK14	STACA0001_1021	-78	5.1	AAATTTCAGAAAATT
Staphylococcus carnosus subsp. carnosus TM300	Sca_2265	-83	4.8	AATTTTCAGAATTAT
Staphylococcus haemolyticus JCSC1435	SH0589	-75	5.1	AAATTTCTGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0435	-75	4.9	TATTTTCAGAATATT
	CALICADO 0407	205	4.0	
	<u>SAUSA300_2497</u>	-205	4.8	ATTAATCTGAAAATT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: mtnE Ortholog function: transaminase MtnE involved in methionine biosy	nthesis via salvage pa	thway		
Staphylococcus aureus subsp. aureus N315	SA2347	-205	4.8	ATTAATCTGAAAATT
Staphylococcus capitis SK14	STACA0001_0934	-212	4.2	AAATGTTTGAAAATA
		-93	4.6	ACTTATCTGAAAATT

	Locus tag	Position	Score	Sequence
Staphylococcus epidermidis ATCC 12228	SE2122	-61	4.4	TTATTTCAGAAAATT
Staphylococcus epidenniuis ATCC 12220	<u>3E2122</u>	-52	4.5	AAAATTCTAACTATT
Stanbulaceaus carnesus suban carnesus TM200	Sec. 0010	-32 -257	4.4	
Staphylococcus carnosus subsp. carnosus TM300	Sca_0010			AAATGTCAGAATTTT
Staphylococcus haemolyticus JCSC1435	SH0492	-253	4.5	ATAAATCTGAAAATT
		-244	4.4	AAAATTATAAATATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SSP0294</u>	-203	4.3	AATATTCTGATAAAA
Macrococcus caseolyticus JCSC5402	MCCL_0180	-222	4.8	AATATTCTGAATACT
	SAUSA300_2538	-227	4.9	AATTGTTAGAAAATT
	<u>3AU3A300_2536</u>	-22 <i>1</i> -103	4.8	ATTTTTCAGAATTT
Compared by year letter of orthology from yellowing a solution				
Supported by regulated orthologs from reference regulons Ortholog gene name: SA2396				
Ortholog function: putative amino acid transporter				
Staphylococcus aureus subsp. aureus N315	SA2396	-226	4.9	AATTGTTAGAAAATT
		-103	4.8	ATTTTTCAGAATTTT
		-94	4.2	AATTTTTAGACAAAA
Staphylococcus capitis SK14	STACA0001_0893	-295	4.3	AATTTGTAAAATATT
, ,		-160	4.8	ATTTTTCAGAATTTT
		-151	4.2	AATTTTTAGACAAAA
Staphylococcus epidermidis ATCC 12228	SE2147	-165	4.8	ATTTTTCAGAATTTT
Staphylococcus epidermidis ATOC 12220	<u>5L2141</u>	-156	4.2	AATTTTTAGACAAAA
Stanbulgeoccus hapmaluticus ICSC1425	SHUVEU			
Staphylococcus haemolyticus JCSC1435	SH0460	-114	5.1	AATTTTCAGAAATTT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP0274	-98	5.3	AATTTTCTGAATATT
		-89	4.3	AATATTTAGATATAT
	SAUSA300_2539	-127	4.5	AATTATCAGAATATA
Our and all house what a distribution from the form of the same and the				
Supported by regulated orthologs from reference regulons				
Ortholog gene name: gabT Ortholog function: 4-aminobutyrate aminotransferase				
Staphylococcus aureus subsp. aureus N315	SA2397	-136	4	AAAATTCTTAATTAT
		-127	4.5	AATTATCAGAATATA
Staphylococcus capitis SK14	STACA0001_0892	-175	4.7	AATATTTTAATAATT
		-166	4.3	ATAATTCAGAAAATA
Staphylococcus epidermidis ATCC 12228	SE2148	-164	4.6	AATATTCTAAATTAT
otaphylososous opidomilais /1100 12220	<u>022110</u>	-155	4.6	AATTATCAGAAAATA
Stanbulgangua carnagua guban, carnagua TM200	Sca 0283	-127	4.8	AAATATCTGAAAATT
Staphylococcus carnosus subsp. carnosus TM300				
Staphylococcus haemolyticus JCSC1435	SH0459	-145	4.6	ATTATTCAGAAAATA
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	<u>SSP0353</u>	-218	4.6	ATTTTTCAGAATATA
	SAUSA300_2572	-199	4.3	AAATTTTAAAATATA
	5.155/1000_E012	-175	4.7	AATTTTTAAAATTTT
		-68	4.6	ACTTTTCTGAAAAAT
		-00	4.0	ACTITICIGAAAAAT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: aur Ortholog function: zinc metalloproteinase aureolysin				
Staphylococcus aureus subsp. aureus N315	SA2430	-68	4.6	ACTTTTCTGAAAAAT
Staphylococcus capitis SK14	STACA0001_1850	-30	4.2	CTTTTTCAAAAATTT
		7	4.4	ATTTTTCAAAATATG
Staphylococcus epidermidis ATCC 12228	SE2219	-69	4.9	ACTTTTCAGAAAATT
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	SSP1542	-104	4.3	ATAATTCAAAATAAT
	SAUSA300_2600	4	4.4	AATTTTTTAACTTTT
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>icaA</u> Ortholog function: intercellular adhesion protein A				
Staphylococcus aureus subsp. aureus N315	SA2459	4	4.4	AATTTTTTAACTTTT
otaphylococous auteus subsp. auteus 19515	OU5402	4	4.4	AATTITIAACITIT

	Locus tag	Position	Score	Sequence
Staphylococcus capitis SK14	STACA0001_0088	4	4.4	AATTTTTTAACTTTT
	SAUSA300_2613	-142	4.6	AATTTTCTGAAAAAG
Supported by regulated orthologs from reference regulons				
Ortholog gene name: <u>hisZ</u> Ortholog function: ATP phosphoribosyltransferase regulatory subur	nit			
Staphylococcus aureus subsp. aureus N315	SA2472	-142	4.6	AATTTTCTGAAAAAG
	050070	-115	5.1	AATTTTCTGAAAAAT
Staphylococcus epidermidis ATCC 12228	SE0270	110		
	Sca_0637	-125	4.2	ATTTTTATTAATATT
Staphylococcus epidermidis ATCC 12228 Staphylococcus carnosus subsp. carnosus TM300			4.2 5	ATTTTTATTAATATT AATATTCAGAATTTT

 $@\ 2009\text{-}2017\ RegPrecise \\$