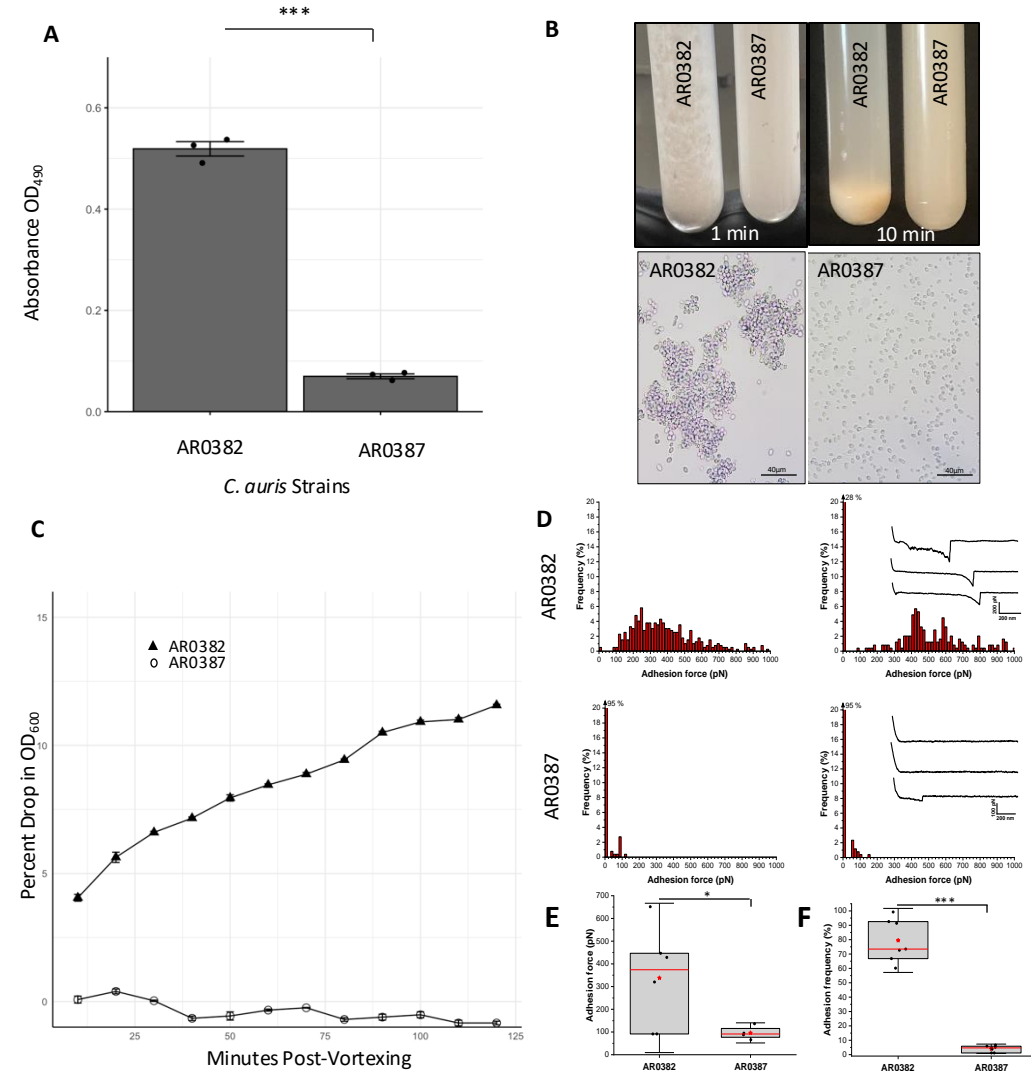


Fig. S1. Comparative evaluation of biofilm formation, aggregation and cell-cell adhesion force by the wild-type AR0382 (aggregative) and AR0387 (non-aggregative) phenotypes. **(A)** Metabolic activity of 24 h biofilms based on measurements of OD₄₉₀, optical density. Bar-graphs shows mean and standard error of mean of $n = 3$ biological replicates, each as an average of 4 technical replicates. Statistical analysis was performed by an unpaired two-tailed Welch's t-test. $P = 2.243 \times 10^{-5}$. **(B)** Aggregation assays, following vigorous vortexing of cell suspensions comparing cell aggregates of AR0382 and AR0387. Bright-field microscopy (lower panel) of aliquots of cell suspensions demonstrating presence of aggregates of AR0382 cells compared to singly suspended cells of AR0387. **(C)** Measurement of rate of cell sedimentation by absorbance readings of OD₆₀₀ of wild-type strains AR0382 and AR0387 over 2 h following vigorous vortexing. Values represent mean OD and standard error of mean of three technical replicates. **(D)** Single-cell force spectroscopy of *C. auris* cell-cell adhesion. Adhesion force histograms with representative retraction profiles (inset) obtained for the interaction between AR0382 wild-type cells and the interaction between AR0387 cells; 2 representative cell pairs are shown for each strain. **(E)** Adhesion force boxplots depicting $n = 6$ and $n = 4$ cell pairs for AR0382 and AR0387 respectively. Statistical analysis was performed by an unpaired two-tailed Welch's t-test. $P = 4.21 \times 10^{-2}$ **(F)** As in **(E)**, adhesion frequency boxplots show interactions between $n = 7$ cell pairs for both strains. $P = 8.06 \times 10^{-6}$. Red stars represent the mean values, red lines are the medians, boxes are the 25–75% quartiles and whiskers the standard deviation from mean. * $0.01 < P \leq 0.05$, *** $P < 0.001$.



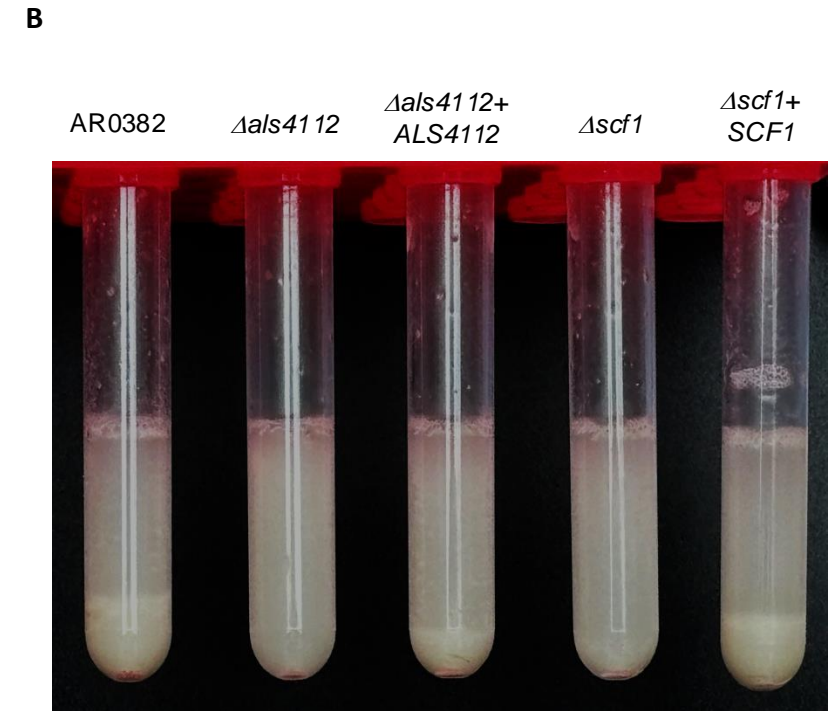
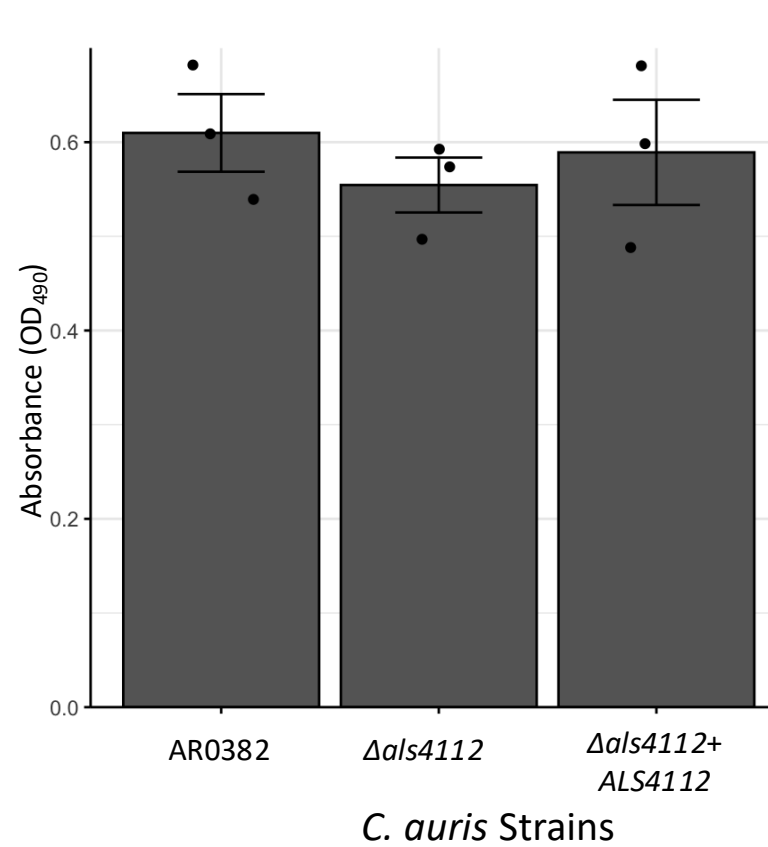
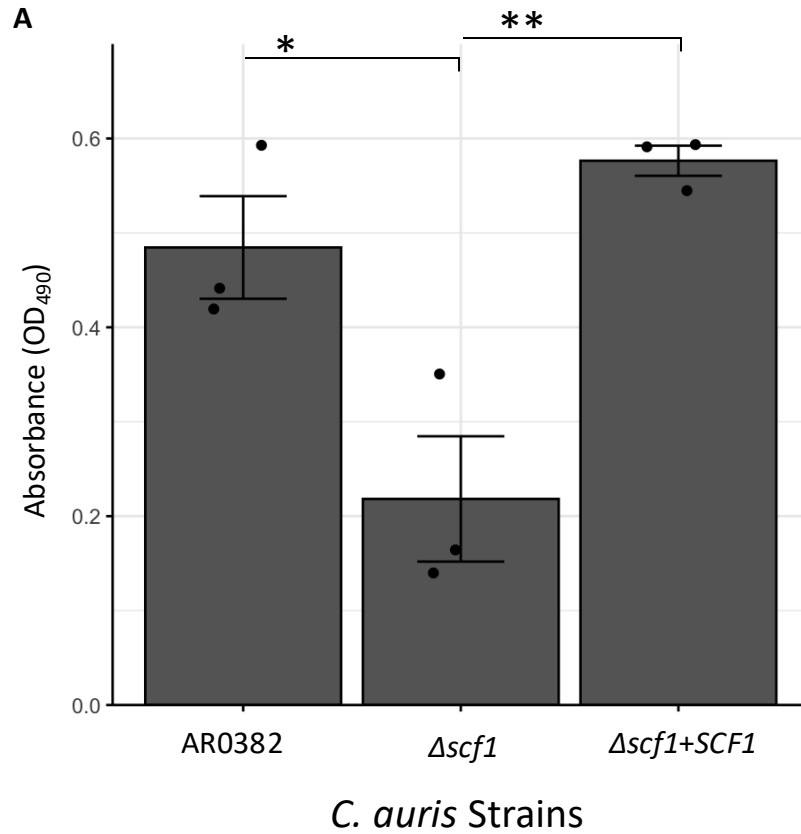


Fig. S2. Comparative evaluation of biofilm formation and aggregation by complemented strains of mutants of *ALS4112* and *SCF1* genes ($\Delta als4112+ALS4112$ and $\Delta scf1+SCF1$) to their respective mutants and wild-type strain. (A) Metabolic activity of 24 h biofilms based on measurements of OD₄₉₀. Bar-graphs shows mean and standard error of mean of $n = 3$ biological replicates, each as an average of 4 technical replicates. Statistical analysis was performed by one-way ANOVA and post-hoc Tukey test with p -values representing significant differences. $P = 2.25 \times 10^{-2}$, 5.72×10^{-3} ** $0.001 < P \leq 0.01$, *** $P < 0.001$. **(B)** Cell aggregation following 2 min of vigorous vortexing.

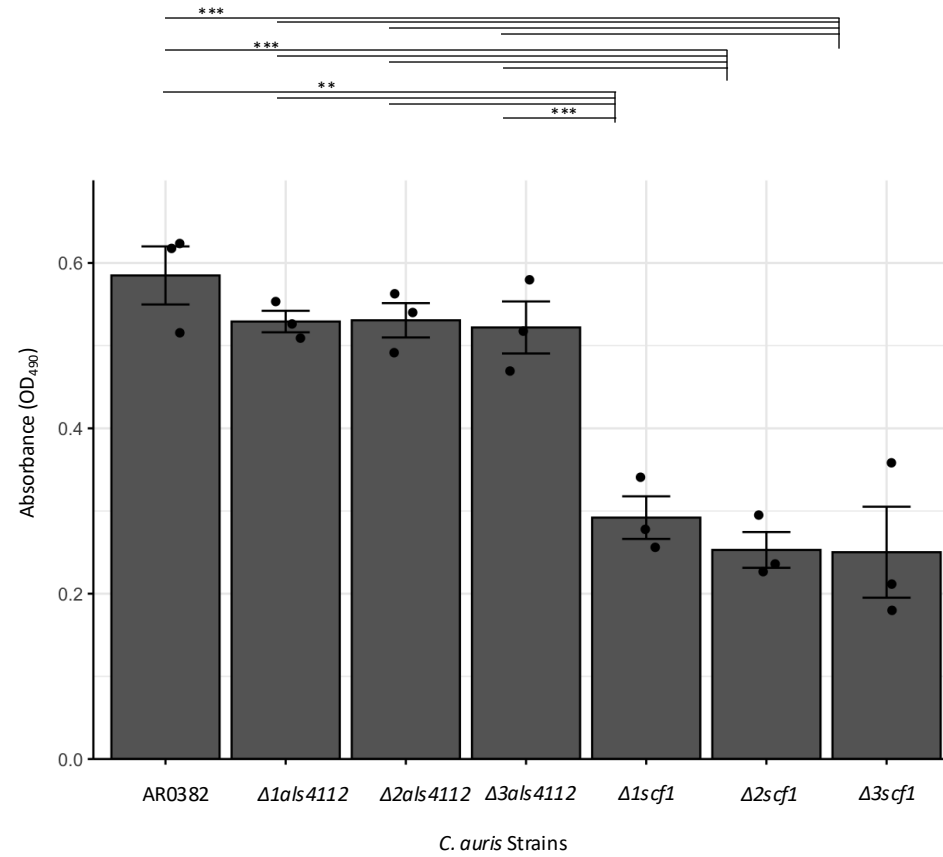


Fig. S3. Evaluation of biofilm formation by the 3 mutant strains generated for the *ALS4112* and *SCF1* genes ($\Delta 1$ - $\Delta 3$). A measurement of the metabolic activity of 24 h biofilms based on values of OD₄₉₀ comparing all generated mutant strains to the wild-type. Boxplots show mean and standard error of mean of $n = 3$ biological replicates, each as an average of 4 technical replicates. Statistical analysis was performed by one-way ANOVA and post-hoc Tukey test with p -values representing significant differences. $P = 1.64 \times 10^{-3}$, 1.55×10^{-3} , 2.18×10^{-3} , 2.02×10^{-4} , 3.70×10^{-4} , 3.50×10^{-4} , 4.83×10^{-4} , 5.17×10^{-5} , 3.35×10^{-4} , 3.17×10^{-4} , 4.37×10^{-4} , 4.71×10^{-5} ** $0.001 < P \leq 0.01$, *** $P < 0.001$.

Supplementary Table 1 (S1). Primers used in this study.

Marker	Purpose	Primer name	Sequence (5'-3')
<i>B9J08_004112</i>	US_cloning	CauALS5_US_GIB_F	AACTTCCTCGAGGGGGGGCCGAAAGATGATGGGAAACAA
			GGTGAAG
	US_cloning	CauALS5_US_GIB_R	AGGGAACAAAAGCTGGGTACCTCACCACGAGACGGGAG
			C
	DS_cloning	CauALS5_DS_GIB_F	GCGAATTGGAGCTCCACCGCGGTCCCCAGGTGCTATTTTC
			TTG
	DS_cloning	CauALS5_DS_GIB_R	AGATCCACTAGTTCTAGAGCACGTGAGCTTTTATGATACC
			TAC
	crRNA	ALS5_crRNA	GTACTCAGGCGAAAACATCG
<i>B9J08_001458</i>		ALS5US_chF	GTCATTCTTCCTTGTTTCCG
		ALS5DS_chR	CATTTGCAGAGAAGAAATCTGCGC
	US_cloning	Gbson_RBT1US_F	TAGAAAGTATAGGAACTTCCTGTGGAGGTGAAGTTTAAAG
			ATAGAG
	US_cloning	Gbson_RBT1US_R	AGGGAACAAAAGCTGGGTACGCTCGCCGCTCACAATG
	DS_cloning	Gbson_RBT1DS_F	CTATAGGGCGAATTGGAGCTGTCTGGGATTGTGGGAATTC
			AGATCCACTAGTTCTAGAGCTTCTAATGACTGATACTCAT
			ACTTTC
	Verify deletion	RBT1US_chF	ATGTGCTTCTTCTGGGTCTTTTG
pSFS2	Verify deletion	RBT1DS_chR	GCGATAGGAGACGATGTTGATAAC
	crRNA	RBT1_crRNA	CTAGGTCCACTAGGTCCACT
	PCR/Seq/verify deletion	pSAT1_US-cPCR_F	CTAACGATGCATACGACTACATC
	PCR/Seq/verify deletion	pSAT1_DS-cPCR_R	ACATATGTGAAGTGTGAAGGGGG