



1 **Fig. S2. Effect of a *lapA* mutation on citrate-mediated biofilm formation.** (A) Quantitative  
2 analysis of dose-dependent biofilm formation by WT *P. fluorescens* by addition of increasing  
3 concentrations of citrate. Citrate concentrations of 0%, 0.4%, and 0.8% were tested. (B)  
4 Quantitative analysis of biofilm formation by the WT and *lapA* mutant of *P. fluorescens* in the  
5 presence and absence of citrate. (C) Quantification of LapA levels in whole cell lysate in the  
6 presence and absence of 0.4% citrate by WT *P. fluorescens* Pf0-1. Representative blots are  
7 shown. Data shown is the average of three replicates ( $\pm$  SD). (D) Growth of WT *P. fluorescens* in  
8 the presence and absence of citrate for 6 hours at 30°C. (E) Motility by WT *P. fluorescens* in the  
9 presence and absence of citrate at 30°C for 30 hours using a soft agar (0.3%) motility assay.  
10 Representative images are shown. In all experiments in this figure, assays were performed in  
11 triplicate ( $\pm$  SD), and horizontal black bar indicates a P value of <0.05 (\*), <0.01 (\*\*), or <0.001  
12 (\*\*\*) by a student's t-test comparing each strain without citrate versus with added citrate, or in  
13 panel A, comparing the two different citrate concentrations tested.