Fig. S1. Response to signal and cell density using a las/rhl double-mutant. (A) lasB expression per cell is highly induced by 5 μM 3O-C12-HSL and C4-HSL at high density (0.125% CAA) but less so at low density (0.03125% CAA) cultures \( (P < 0.0001) \). A concentration of 20 μM 3O-C12-HSL and C4-HSL induces lasB to significantly higher levels at low cell density \( (P < 0.0001) \). (B) Increased fitness (growth) of the population occurs under conditions of high cell density but not low cell density, even at high signal concentration \( (P < 0.02) \). All results are shown as means ± SD, six replicates per treatment.
Fig. S2. Manipulating cell density with casamino acids (CAA). (A) The PA01 \textit{lasI}::Gm\textsuperscript{R} (signal-negative) mutant grew to higher cell densities when provided with more CAA, both in the presence and absence of the signal \textit{N-(3-oxododecanoyl)-L-homoserine lactone} (3O-C\textsubscript{12}-HSL; 20 \textmu M). (B) The \textit{lasB} expression per cell (in relative light units) of the PA01 \textit{lasI}::Gm\textsuperscript{R} (signal-negative) mutant was increased by the addition of the signal 3O-C\textsubscript{12}-HSL (20 \textmu M). All results are shown as means (± SD), eight replicates per treatment.