



Figure 1 pH_c dynamics during growth. (a) Growth (filled triangles) and pH_c (filled circles) were monitored during growth on glucose in microplates. Data points represent the average of 24 biological replicates, error bars represent standard deviations. (b) Medium exchange experiments show that the pH_c decrease during the growth phase is determined not by the state of the cell, but the environmental conditions generated in the culture medium. Early and late log phase cells were harvested and resuspended in fresh medium, late log medium, and late log medium supplemented with all nutrients. (c) CO_2 causes pH_c acidification. Strains were grown for 10 hours in either aerobically (closed bars) or anaerobically (open bars). After 10 hours the pH_c of both strains was determined. Cultures were subsequently aerated for 30 minutes by bubbling air through the culture followed by pH_c determination.