

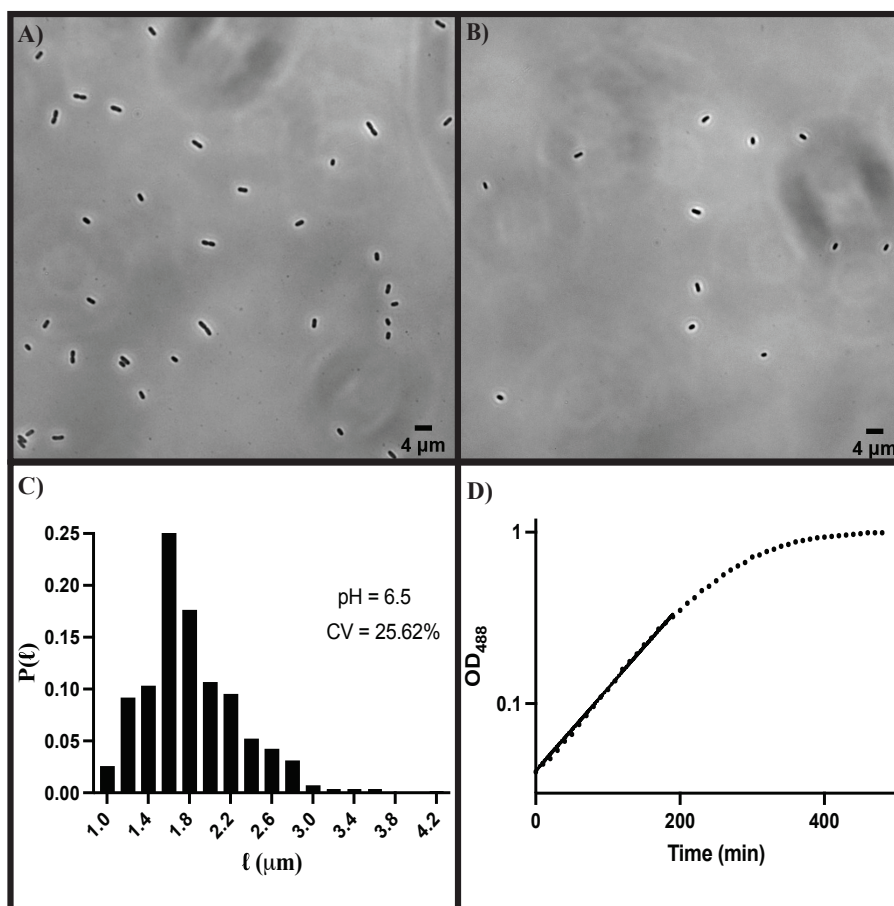
Article

# Supplementary Information: Morphological phenotypes, cell division, and gene expression of *Escherichia coli* under high concentration of Sodium Sulfate

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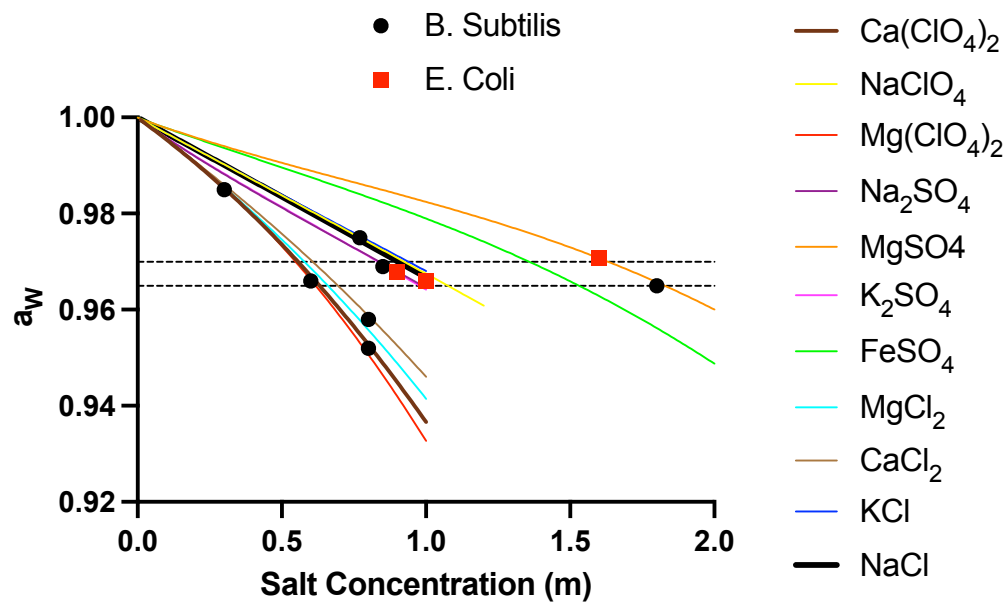
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**Fig. S 1.** Representative images of cells grown at (A) at pH= 7.0, and (B) at pH= 6.45. (C) Probability distribution of cell length at pH=6.45. (D) Linear-log plot of the growth curve of the cells at pH= 6.45. The doubling time ( $\tau_d = 60 \pm 5$  min) decreases by a small amount compared to cells grown in pH= 7. Both the cell morphology and cell growth exhibit negligible changes in morphology compared to cells grown in 1.0 m  $\text{Na}_2\text{SO}_4$ , corresponding to the lowest pH= 6.45.

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**Fig. S 2.** Water activity,  $a_w$ , as a function of salt concentration of various salts. We also show the limiting water activity for *E. coli* (squares) and *B. Subtilis* (circles) in different salts. Dotted lines are constant  $a_w$  lines for  $a_w = 0.965$  and  $a_w = 0.970$ .