Alterations in glucose metabolism in Vibrio cholerae serogroup O1 El Tor biotype strains

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### Supplementary Fig. S1.

Supplementary Fig. S1. Growth curve (left) and pH changes in cultures (right) of *V. cholerae* strains in glucose-supplemented media. (a) Wave 1 prototype EI Tor strain T19479, (b) Wave 2 atypical EI Tor strain MJ1236, (c) Wave 2 atypical EI Tor strain MG116025, and (d) Wave 3 atypical EI Tor strain IB4122. Glucose was added to LB media at 0% (filled circle), 0.5% (circle), 1.0% (inverted filled triangle), and 1.5% (inverted triangle). Values of mean ± standard deviation (viable cell count) and a representative result (pH) are shown.



#### Supplementary Fig. S2.

Supplementary Fig. S2. Alterations in glucose metabolism in El Tor biotype strains by a single-base deletion in VC1589: Wave 1 and 2 strains. Growth curve (left) and pH changes in cultures (right) of El Tor biotype strains in glucose-supplemented media. (a) Derivative of Wave 1 El Tor strain T19479 containing nonfunctional VC1589 (strain DHL002) and (b) derivative of Wave 2 atypical El Tor strain MJ1236 that contained functional VC1589 (strain DHL004). Values of mean ± standard deviation (viable cell count) and a representative result (pH) are shown.



#### Supplementary Fig. S3.

Supplementary Fig. S3. Comparison of viability of the strains that contain nonfunctional VC1589 (left) and strains that harbor functional VC1589 (right) at different glucose concentrations. Viable cell counts in LB (a), LB supplemented with 0.5% glucose (b), 1.0% glucose (c), and 1.5% glucose (d). Bacterial viability results of Fig. 1 – 3 and Supplementary Fig. S1 – S2 are combined.



# Supplementary Fig. S4.

Supplementary Fig. S4. Difference in the rate of decrease in pH in culture media determines the rate of loss of viability of *V. cholerae* strains. The pH changes in cultures supplemented with 1% glucose were compared for (a) DHL002 (filled circle) and T19479 (circle), (b) MJ1236 (filled circle) and DHL004 (circle), and (c) MG116025 (filled circle) and DHL005 (circle).



# Supplementary Fig. S5.

Supplementary Fig. S5. Growth curve (left) and pH changes in cultures (right) of *E. coli* DH5 $\alpha$  (a) and *S.* Typhi (b) in glucose-supplemented media. Glucose was added to LB media at 0% (filled circle), 0.5% (circle), 1.0% (inverted filled triangle), and 1.5% (inverted triangle). Values of mean ± standard deviation (viable cell count) and a representative result (pH) are shown.

