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## **Supporting Information**

# Bacteria Encapsulation and Rapid Antibiotic Susceptibility Test Using a Microfluidic Microwell

#### **Device Integrating Surface-enhanced Raman Scattering**

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## **Supplementary Figures**



Figure S1 The 10<sup>4</sup> CFU/mL GFP-transfected bacteria encapsulated in the (A) triangular microwell and (B) circular microwell.



Figure S2 (A) The MIC determination of four bacteria strains: (1) susceptible *E. coli*; (2) resistant *E. coli*; (3) susceptible *S. aureus*, and (4) resistant *S. aureus* using the broth dilution method. (B-E) the OD value of four bacteria strains at each antibiotic concentration were calculated and compared with the OD value of MHB

(green line). Based on the plot, we can determine the MIC value of (1) susceptible *E. coli*; (2) resistant *E. coli*; (3) susceptible *S. aureus*, and (4) resistant *S. aureus* are 1, 256, 4, and 64.0  $\mu$ g/mL, respectively (red circle in (A)).