

Automated Multistep Lateral Flow Immunoassay Using a Smartphone for the Quantification of Foodborne Bacteria from Fresh Lettuce

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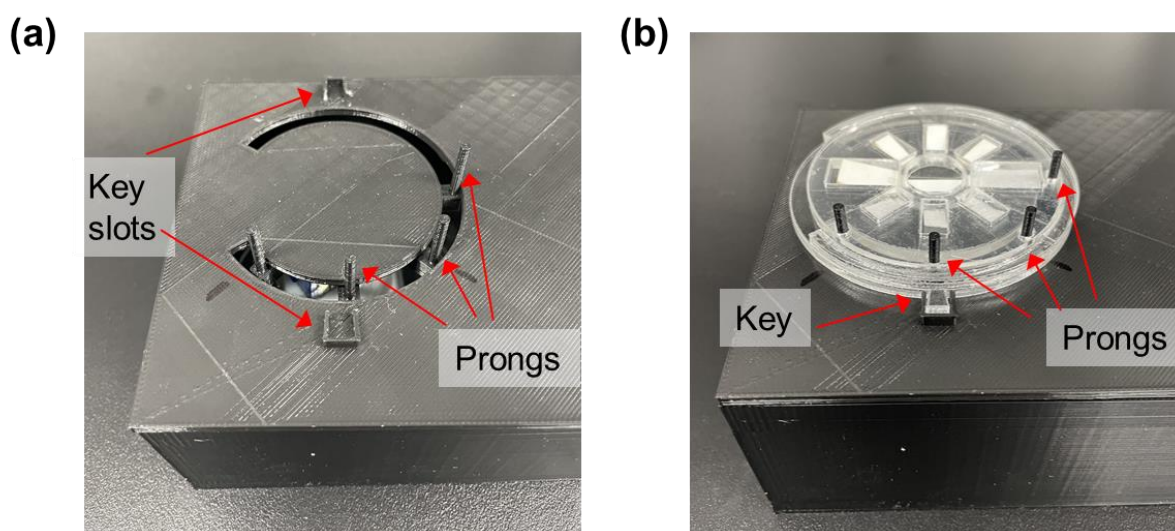


Figure S1. (a) Photo of the platform without the rotary device. Red arrows show the location of the key slots and prongs. (b) Photo of the platform with the rotary device. The key is placed into the key slot to fix the bottom piece and the prongs penetrate the four holes of the top piece so that the servo motor can rotate the top piece only.

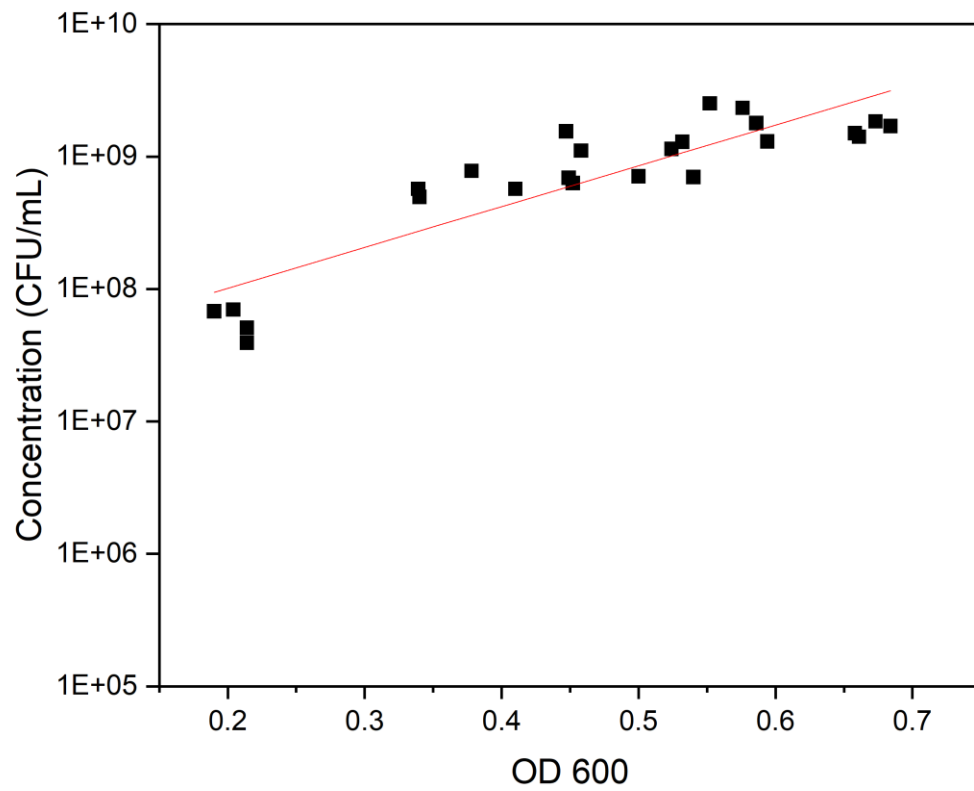


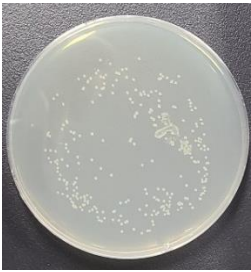



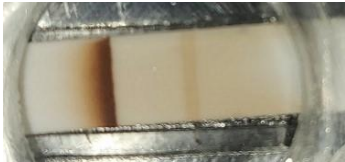



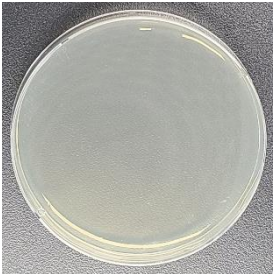


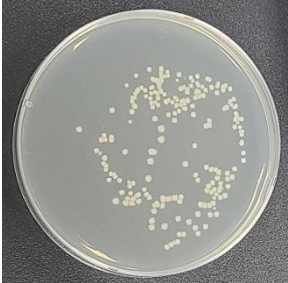



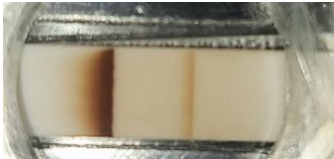
Figure S2. Graph showing the relationship between the concentration of bacteria with respect to optical density (at 600 nm).

Table S1. Inoculated bacteria on the agar plate for colony counting (only the plates showing 30-300 colonies are chosen for accurate enumeration), and detection signal on the LFA strips.



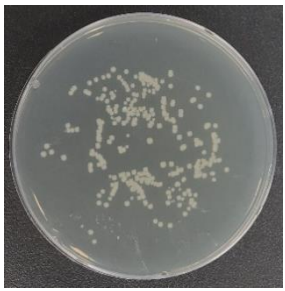

Trial 1

Target concentration (CFU/mL)	0	5.00E+04	5.00E+05	5.00E+06
Inoculated bacteria on the agar plate				
Signal generation from the device				

Trial 2

Target concentration (CFU/mL)	0	5.00E+04	5.00E+05	5.00E+06
Inoculated bacteria on the agar plate				
Signal generation from the device				

Trial 3

Target concentration (CFU/mL)	0	5.00E+04	5.00E+05	5.00E+06
Inoculated bacteria on the agar plate				
Signal generation from the device	