

ELECTRONIC SUPPLEMENTARY INFORMATION

Salivary endotoxin detection using combined mono/polyclonal antibody-based sandwich-type lateral flow immunoassay device

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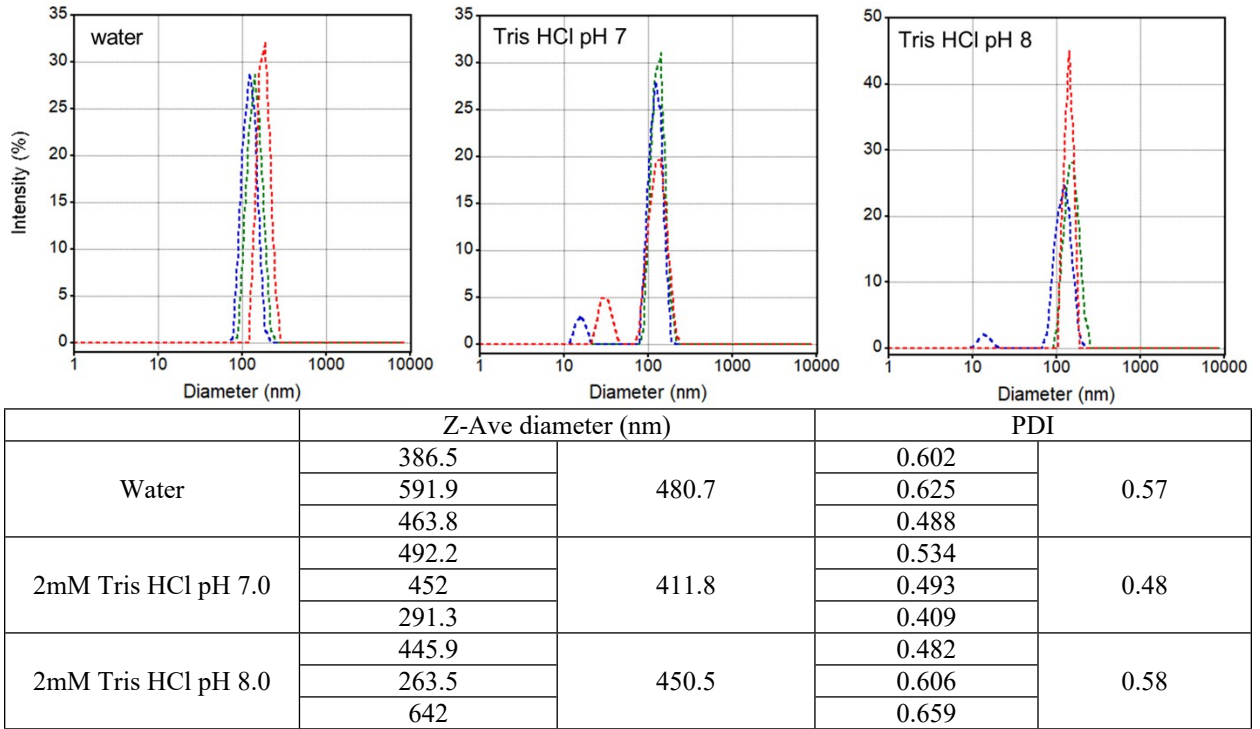


Fig. S1 LPS aggregate size measurements in different buffer solutions. PG LPS concentration is 10 μ g/mL. All measurements were done at back-scattered mode using Zetasizer.

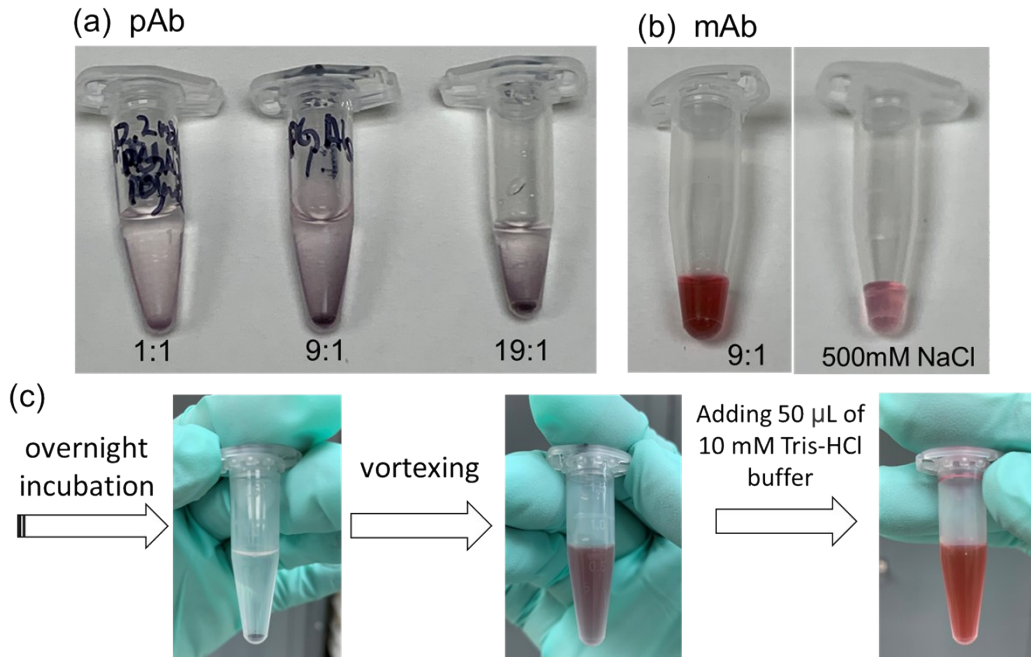


Fig. S2 Antibody and gold nanoparticle conjugations: (a) polyclonal antibody with different volume ratios of AuNP solution (10 O.D.) and antibody (0.2 mg/mL); (b) monoclonal antibody in 9:1 volume ratio of AuNP solution (10 O.D.) and monoclonal antibody (0.2 mg/mL); high concentration NaCl needed to remove non-specific binding does not result in AuNP aggregation; (c) effect of Tris-HCl (pH 8) buffer addition for redispersing mAb-AuNP conjugates and preventing precipitation.

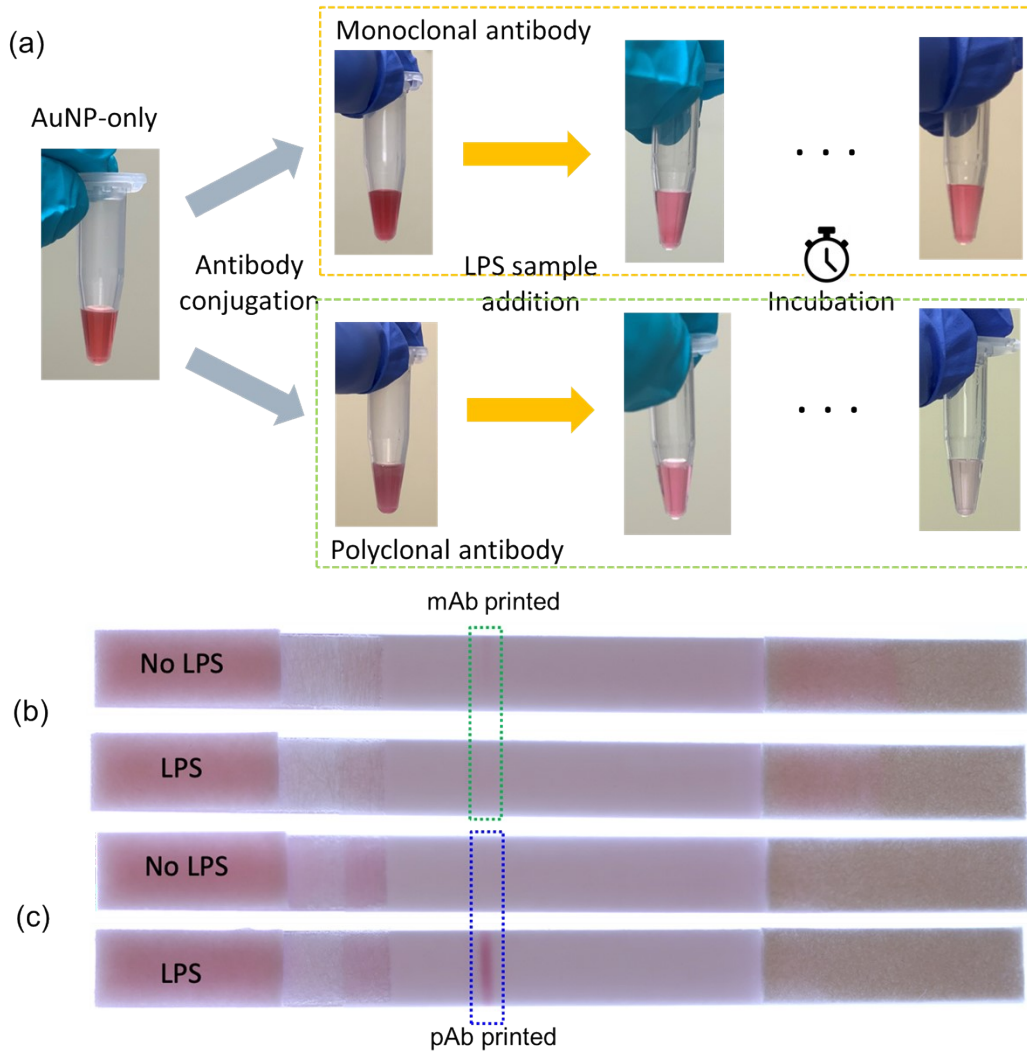


Fig. S3 Use of monoclonal vs. polyclonal antibodies with LPS: (a) in solution; test line formation with mAb-AuNP conjugate either with or without LPS on LFA devices printed with: (b) mAb, (c) pAb.



Fig. S4 Image J analysis of the test line intensity subtracting the mean value of green box area (background) from the mean value of yellow box area.

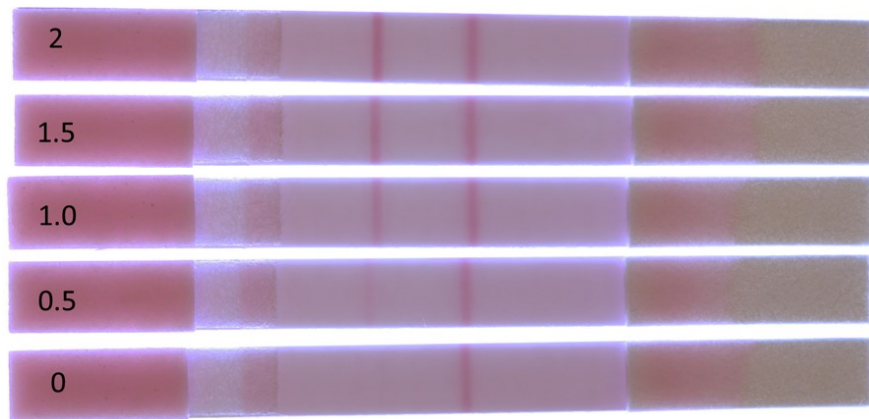


Fig. S5 Treated saliva tests with several LPS concentrations. PG LPS concentration ($\mu\text{g/mL}$) is shown for each LFA strip