## **Supplementary Materials For:**

## Alginate Hydrogel-Embedded Capillary Sensor for Quantitative Immunoassay with Naked Eye

Wenshu Zheng <sup>1,2,3,†</sup>, Cen Gao <sup>1,+</sup>, Liheng Shen <sup>1</sup>, Chang Qu <sup>1</sup>, Xuan Zhang <sup>1</sup>, Lu Yang <sup>1</sup>, Qiang Feng <sup>2,4</sup> and Rongbing Tang <sup>1,\*</sup>

- <sup>1</sup> School of Stomatology, Lanzhou University, Lanzhou 730000, China; <u>wzheng5@tulane.edu (W.Z.);</u> <u>gaoc15@lzu.edu.cn</u> (C.G.); <u>shenlh14@lzu.edu.cn</u> (L.S.); <u>quchang3313@mails.jlu.edu.cn</u> (C.Q.); xuanzhang18@lzu.edu.cn (X.Z.); <u>yanglu19@lzu.edu.cn</u> (L.Y.)
- <sup>2</sup> National Center for Nanoscience and Nanotechnology, University of Chinese Academy of Sciences, Beijing 100190, China; qiang.feng@utsouthwestern.edu
- <sup>3</sup> School of Medicine, Tulane University, New Orleans, LA 70112, USA
- <sup>4</sup> Department of Pharmacology Harold C. Simmons Comprehensive Cancer Center, University of Texas Southwestern Medical Center, TX 75390, USA
- \* Correspondence: tangrb@lzu.edu.cn
- + These authors contributed equally to this work.

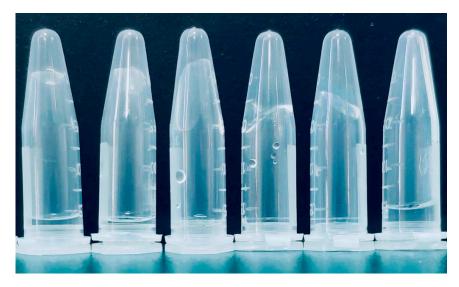


Figure S1. Photos of alginate hydrogel crosslinked with different concentration (from left to right 0.5 mM, 1 mM, 2 mM, 4 mM, 8 mM, 16 mM, 0) of CuCl<sub>2</sub>

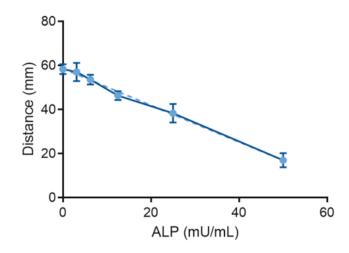


Figure S2. Linear response between the flow distance and the concentration of ALP using AHCS, mean<u>+</u>SD, n=3

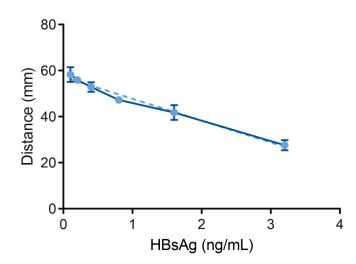


Figure S3. Linear response between the flow distance and the concentration of HBsAg using AHCS, mean<u>+</u>SD, n=3

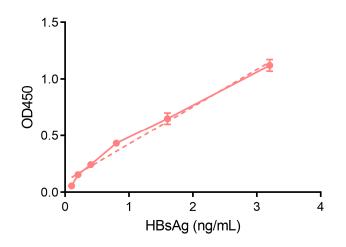


Figure S4. Linear response between the absorbance and the concentration of HBsAg using commercialized ELISA, mean<u>+</u>SD, n=3