

Supplementary Information for

## **Molecularly Imprinted Nanocavity with Transformable Domains That Fluorescently Indicate the Presence of Antibiotics in Meat Extract Samples**

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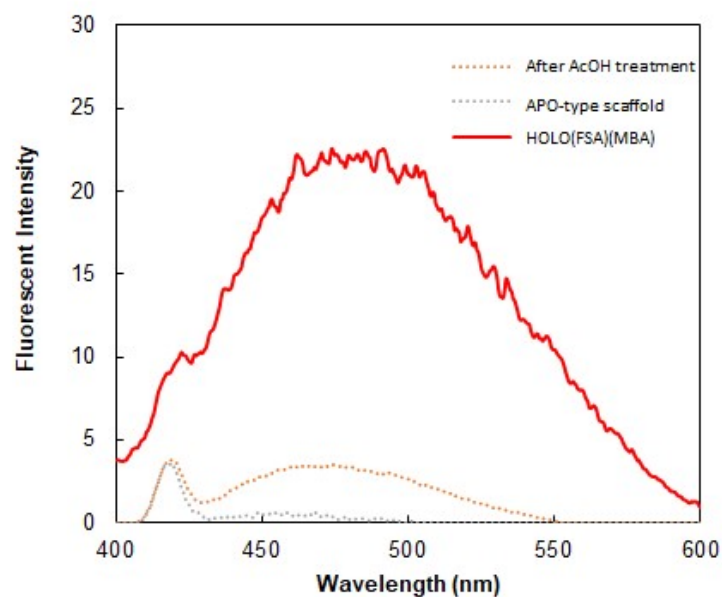
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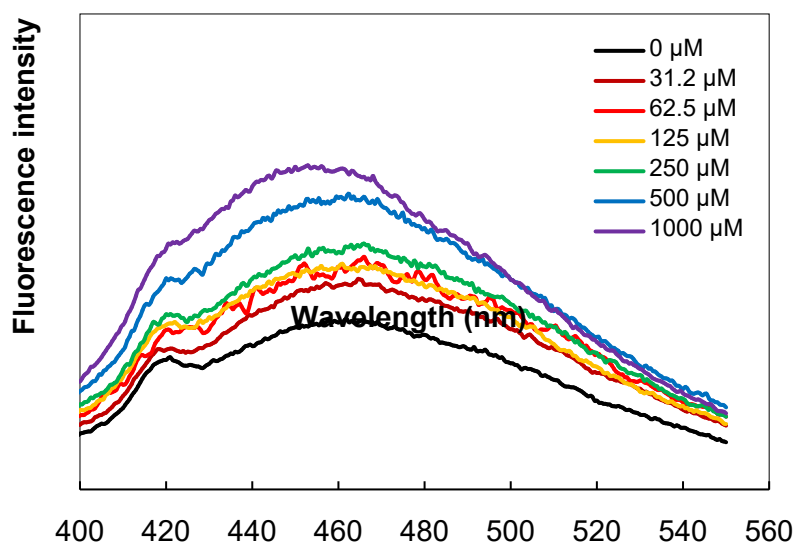
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## 1. Fluorescent measurement of HOLO polymers



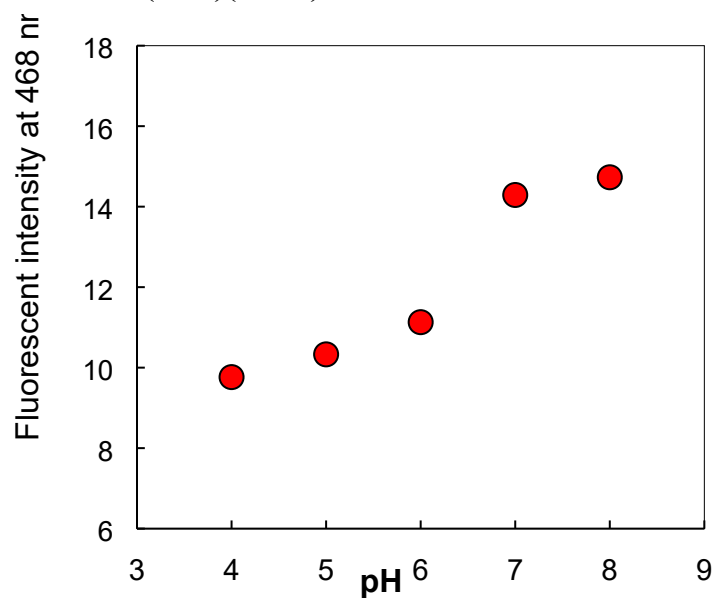
**Figure S1.** Fluorescent spectra of each polymers dispersed in aqueous media (pH 7.2) with excitation wavelength of 365 nm.

## 2. Fluorescent intensity of HOLO(FSA)(MBA)



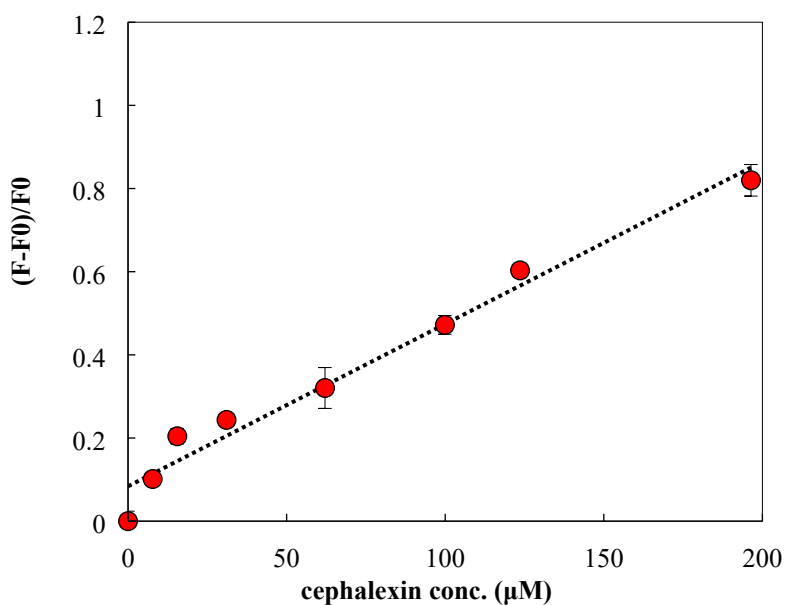
**Figure S2.** Fluorescent spectra of HOLO(FSA)(MBA) with addition of cephalexin ( $\lambda_{\text{ex}}=365$  nm).

### 3. Fluorescent intensity of HOLO(FSA)(MBA)



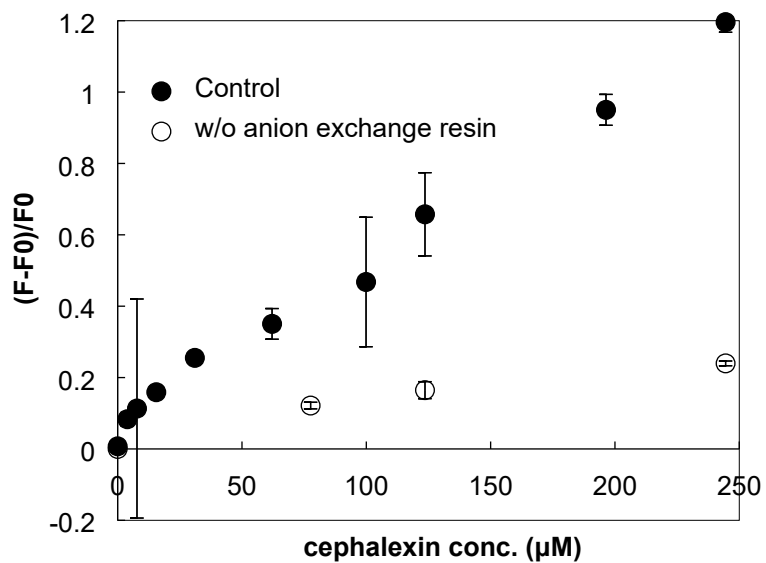
**Figure S3.** Initial fluorescent intensity of HOLO(FSA)(MBA) in aqueous media with different pH values (pH 4-8).

### 4. Calibration curve, linearity range, and limit of detection of the developed sensor



**Figure S4.** Relative fluorescent changes of HOLO polymer toward cephalixin (0 – 196  $\mu\text{M}$ ) in chicken extract samples through pre-treatment. The error bars were obtained from triplicate experiments.

## 5. Recovery test



**Figure S5.** Relative fluorescent changes of HOLO polymer toward cephalixin in chicken extract samples through pre-treatment with anion exchange resin (closed circle) and without that (open circle).