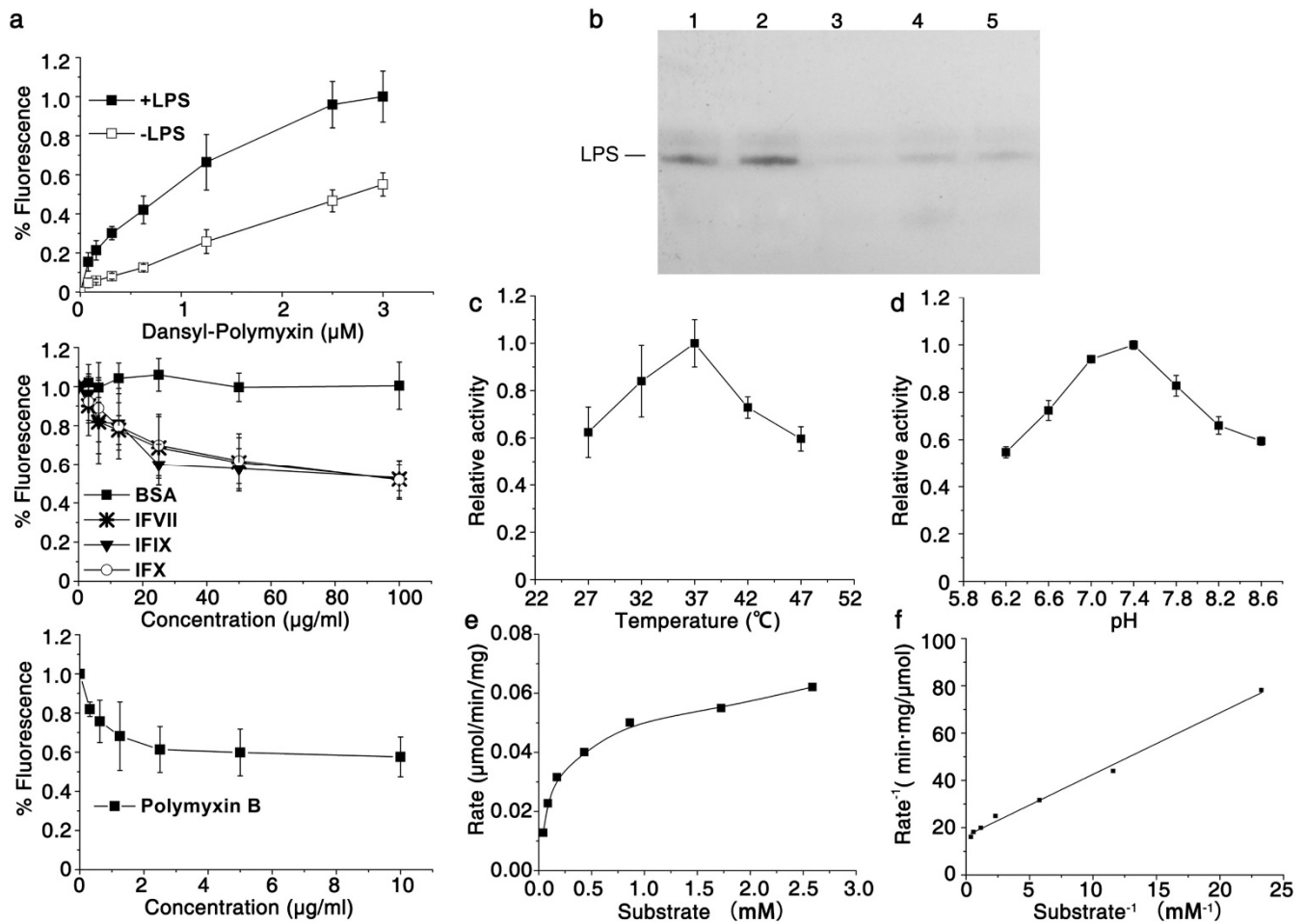


## Supplementary information, Figure S4



**Fig. S4** LCs trigger the hydrolysis of *E. coli* K12 LPS. **a** The LC-dependent inhibition of DPX binding to LPS. DPX was titrated into HEPES buffer containing 0.3  $\mu\text{g}$  of LPS (+LPS) or HEPES buffer alone (-LPS). The optimal concentration of DPX was determined to be 3  $\mu\text{M}$  (top). Serial concentrations of the LCs or BSA were incubated for 30 min with 0.3  $\mu\text{g}$  of LPS, and then DPX was added to a final concentration of 3  $\mu\text{M}$  (middle). Polymyxin B was used as a positive control (bottom). The error bars represent SD ( $n=3$ ). **b** LC treatments lead to a degradation of *E. coli* K12 LPS. Separated samples of untreated LPS (lane 1), BSA-treated LPS (lane 2), IFVII-treated LPS (lane 3), IFIX-treated LPS (lane 4), and IFX-treated LPS (lane 5) on Tricine-SDS-PAGE were examined by silver staining. **c, d** Activity of IFVII with *E. coli* K12 LPS. *E. coli* K12 LPS was used to determine temperature (**c**) and pH (**d**) activity profiles of IFVII. **e** Initial velocity of IFVII-catalyzed hydrolysis of *E. coli* K12 LPS. **f** Lineweaver-Burk plot of IFVII hydrolysis of *E. coli* K12 LPS. In **e** and **f**, hydrolysis reactions were performed under the optimum conditions of 37  $^{\circ}\text{C}$  and pH 7.4.