

Supporting Information

Controllable polymerization of biopolymers in a microreaction system

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Procedure 1S (Measurement of swelling)

To mimic the plasma-oxidized surface of flow-channel in PDMS micromixer, PDMS plates (15 x 10 x 1 mm³) were oxidized in a similar fashion. Then, each plate was soaked in various organic solvents for 24 hours. Less polar solvents including toluene, chloroform, *n*-hexane, diethyl ether, and ethyl acetate, and polar solvents including dioxane, acetone, isopropanol, butanol, ethanol, 1-methyl-2-pyrrolidone (NMP), DMF, acetonitrile, dimethyl sulfoxide (DMSO), methanol, and water were used. After soaking, the weight of each plate was measured. The degree of swelling (%) was calculated according to the following formula; (increased weight – initial weight) x 100 / initial weight.

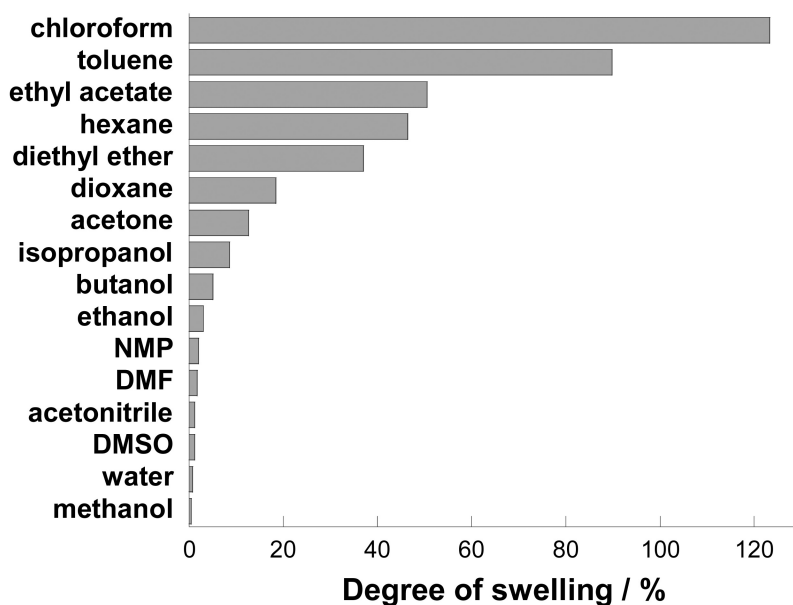


Figure 1S. Swelling of PDMS against various organic solvents. The degree was calculated based on increased weight of PDMS plate by organic solvents. Percentage indicates the rate of increased weight against initial weight of PDMS plate.