Electronic Supplementary Information

Controlled release of antibody proteins from liquid crystalline hydrogels composed of genetically engineered filamentous viruses

Toshiki Sawada, Miyuki Yanagimachi and Takeshi Serizawa*

Department of Chemical Science and Engineering, School of Materials and Chemical Technology, Tokyo Institute of Technology, 2-12-1-H121 Ookayama, Meguro-ku, Tokyo 152-8550 (Japan)

E-mail: serizawa@polymer.titech.ac.jp

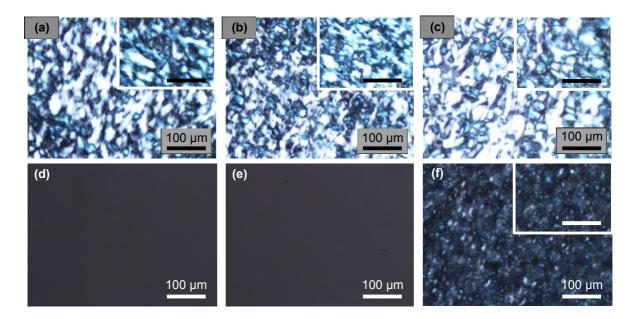


Fig. S1 (a,b) POM images of the hybrid hydrogels composed of gelatin and (a) wild type and (b) HA-peptide displaying phages (HA-phages). (c) POM image of the hybrid hydrogels composed of gelatin and the HA phages containing anti-HA peptide antibody molecules. (d, e) POM images of gelatin hydrogels and phage solutions. (f) POM image of the hybrid hydrogels composed of gelatin and the HA phages containing anti-HA peptide antibody molecules. The concentration of gelatin, phage, and antibody were 1.5 wt%, 1.0 wt%, and 40 nM, respectively except for the phage concentration in (f). The phage concentration in (f) is 0.02 wt%. Inset images represent POM images with a 45° rotation.

Table S1 Remained percent of the HA-phage molecules in the hydrogels after 24 h incubation

[HA phage]/ wt%	0.02	0.05	0.1
%Phage remained	99.98 <	99.99 <	99.99 <

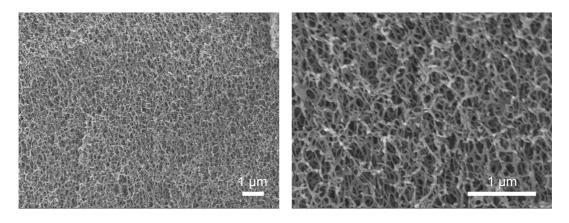


Fig. S2 SEM images of gelatin hydrogels with different magnifying power.