Supplementary information Figure S1-4

Nanogel containing electrospun nanofibers as a platform for stable loading of proteins

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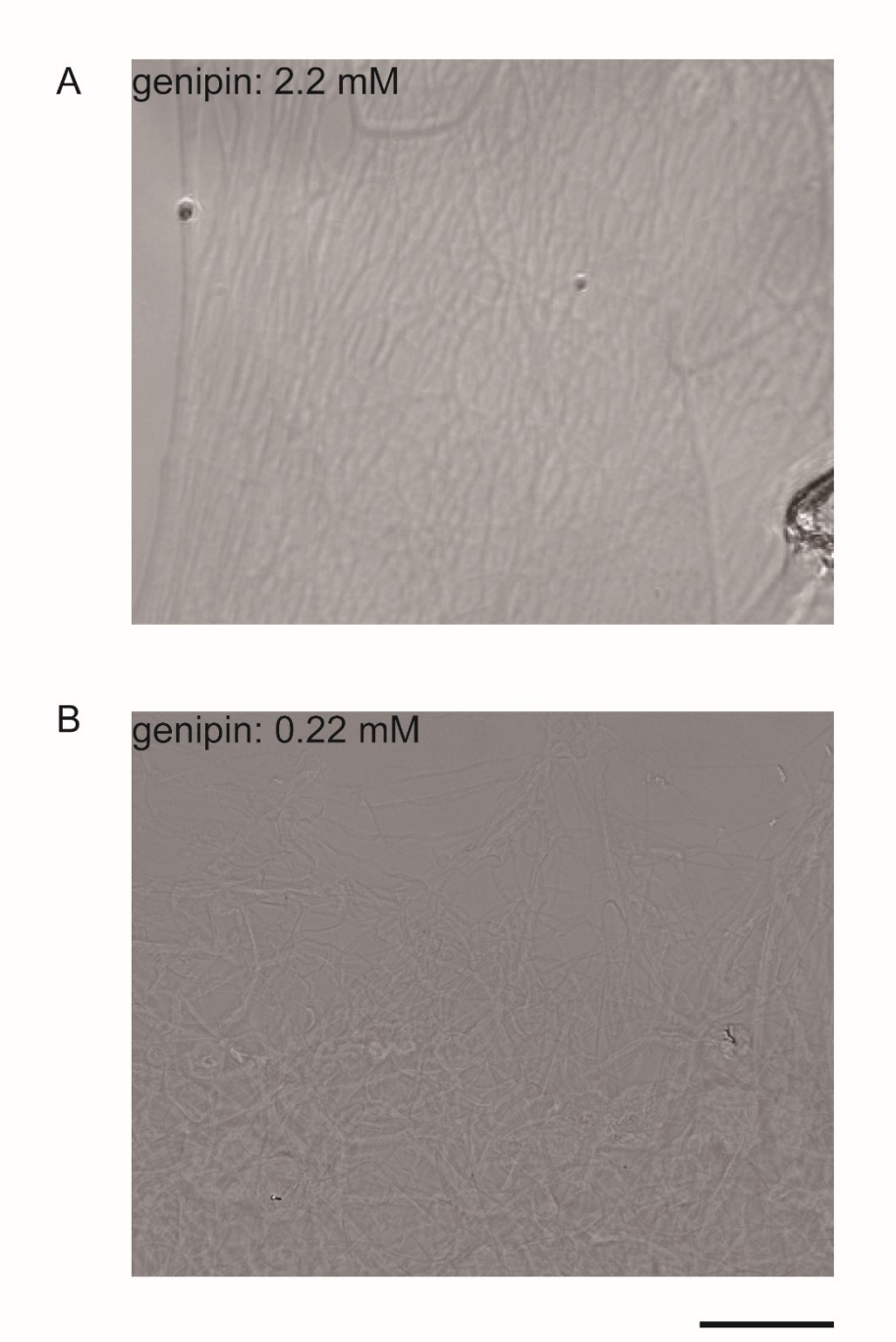
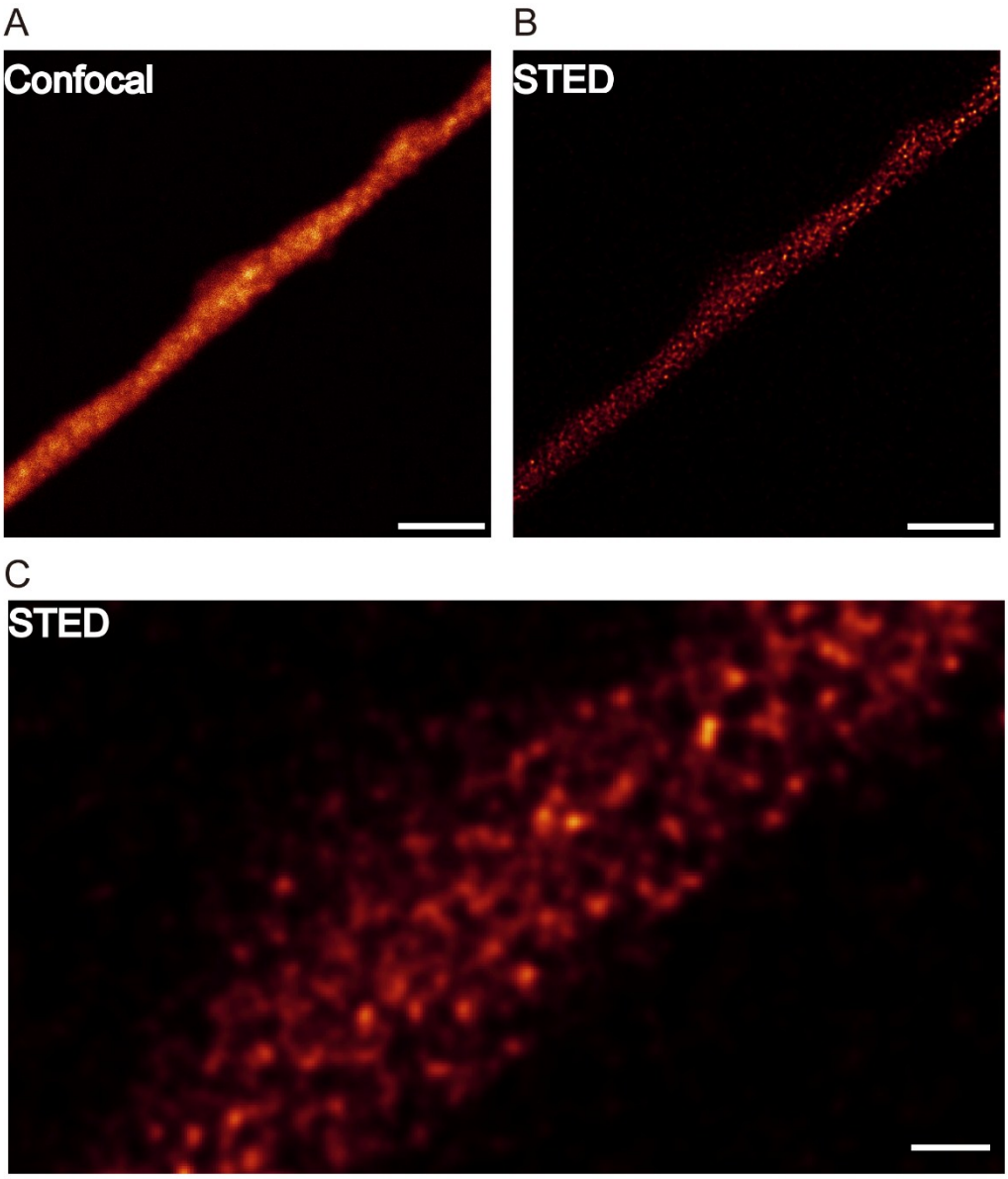
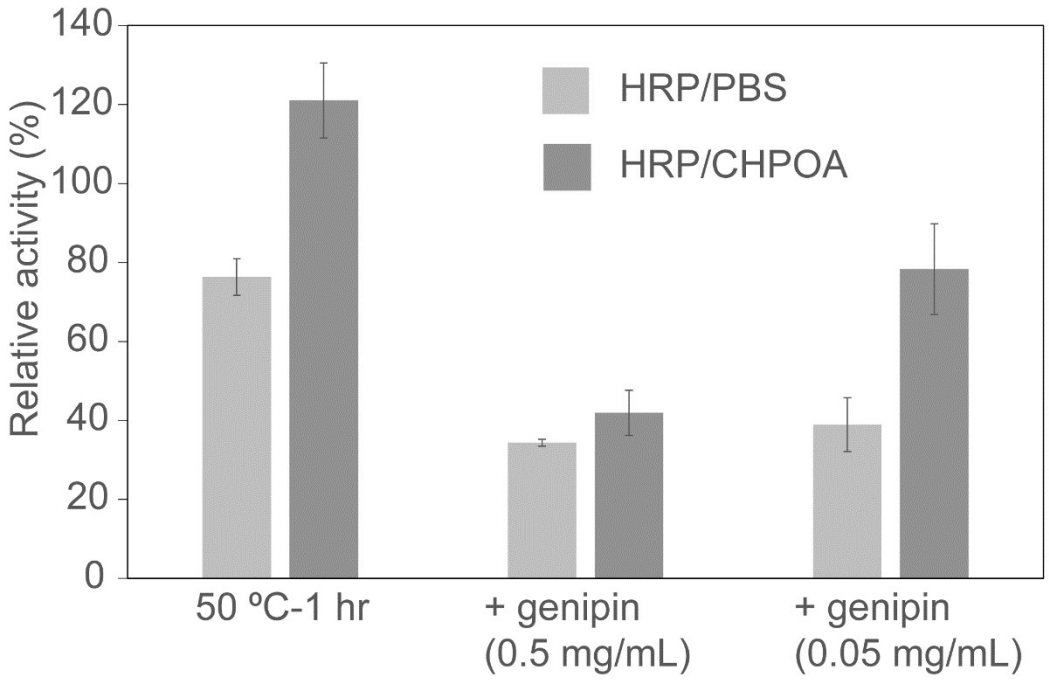


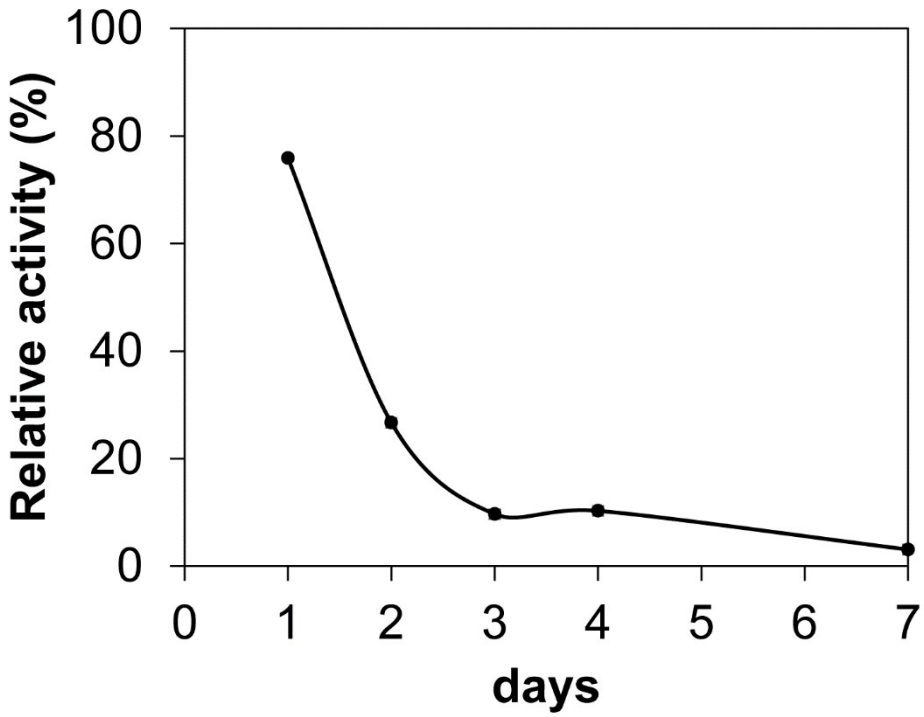
Supplementary Figure S1. Genipin-cross-linked CHPOA / gelatin fibers after soaking in distilled water for one day. Genipin concentrations were 2.2 mM (A) and 0.22 mM (B), respectively. Scale bar = 50 μm.



Supplementary Figure S2. Confocal (A) and STED (B) images of cross-linked POARh/gelatin fibers. Scale bar = 2.5 μm. STED image was deconvolved by Huygens. (C) High magnification image of Supplementary Figure S2B. Scale bar = 500 nm.



Supplementary Figure S3. The effect of genipin concentration on HRP solution with or without CHPOA nanogels. HRP (60 μg/mL) solution was diluted with or without CHPOA nanogel solution (22.2 mg/mL in 10× D-PBS) and was incubated at 37 °C for 24 hr. The samples were heated at 50 °C for 1 hr, and then, genipin in ethanol solution (0.5 or 0.05 mg/mL) was added and incubated for 5 min. The relative HRP activity was measured as described in Experimental Section. The data represents the mean ± the standard deviation, n = 3.



Supplementary Figure S4. Thermal stability of free HRP in PBS at 37 °C. The data represents the mean ± the standard deviation, n = 3.