SUPPORTING INFORMATION

Highly Ordered and Tunable 3D Porous Biomaterials by Using Microfluidics

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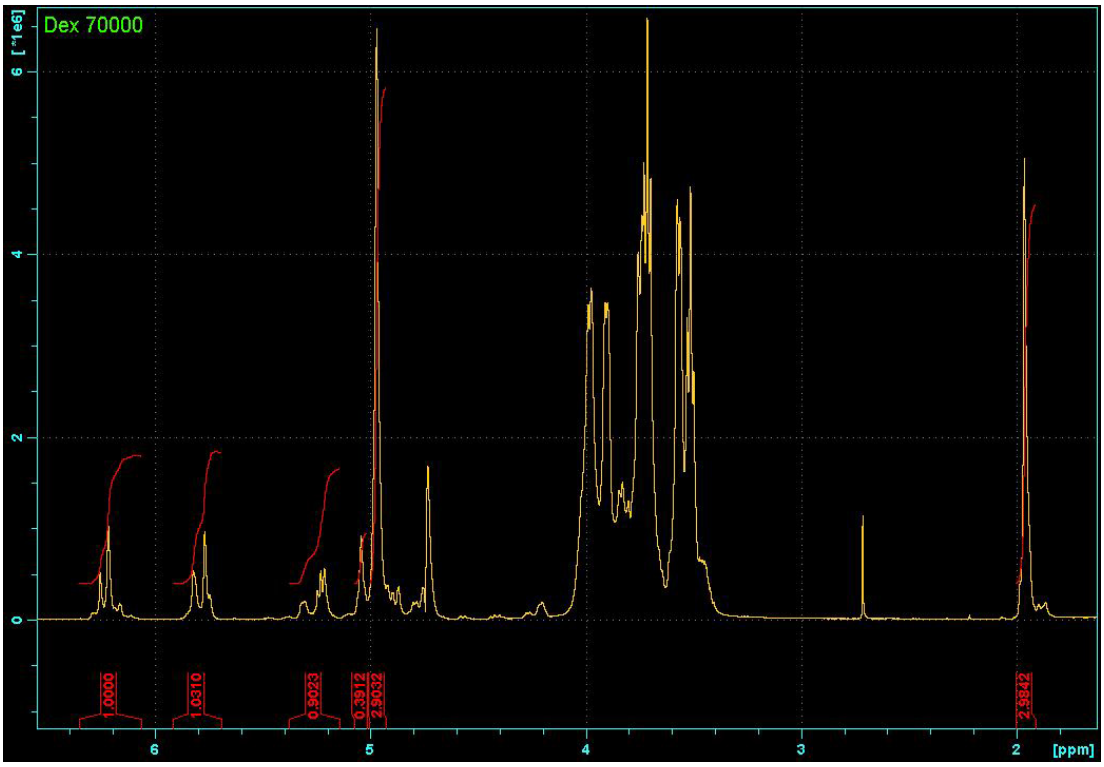

Figure S1. ^{1}H NMR spectra of Dextran-methacrylate T70. The degree of substitution (DS = 35%) was obtained as the ratio $I_{vinyl}/I_{anomeric}$, where I_{vinyl} is the integration of the proton peak assigned to acrylate vinyl proton (δ = 6.20-6.30 ppm) and $I_{anomeric}$ is the integration of –CH (δ = 4.90-5.00 ppm) anomeric proton peak of the dextran repeating unit.

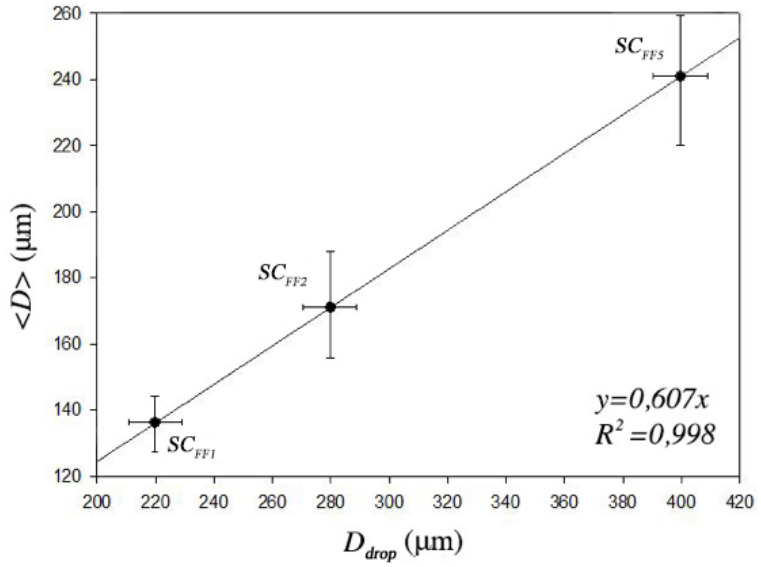

Figure S2. Mean diameter of scaffold pores in dry state (<*D*>) plotted vs. the diameter of templating droplets within FF chips. The samples underwent to the same linear shrinkage of about 40%. We observed the shrinkage of the scaffolds mainly after freeze-drying. However, the crosslinking-reaction might cause a small contraction of the scaffolds as well.

Video 1. 3D reconstruction of a highly ordered ROI (region of interest) of a scaffold fabricated through microfluidic O/W HIPE. The 3D volume was rendered from a stack of 2D cross-sectional slices obtained from µCT scan.

Video 2. Comparison of 3D reconstructions of SC_{FF1}, SC_{FF2} and SC_{FF5} scaffolds. All the samples have the same dimensions: 1.5mm in diameter and 500µm in height.