Supporting Information

Tunable tissue scaffolds fabricated by in situ crosslink in phase separation system

Xifeng Liu,ab Wenjian Chen,ac Carl T. Gustafson,ab A. Lee Miller II,ab Brian E. Waletzki,ab Michael J. Yaszemski,ab and Lichun Lu*ab

a Tissue Engineering and Biomaterials Laboratory, Departments of Orthopedic Surgery, Mayo Clinic College of Medicine, Rochester, MN 55905, USA. * E-mail address: Lu.Lichun@mayo.edu
b Department of Physiology and Biomedical Engineering, Mayo Clinic, Rochester, MN 55905, USA.
c Department of Orthopedics, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

Supplementary Results

S1. Polymer composition on scaffolds morphology

Fig. S1 The sample images of crosslinked 3-D porous PPF-co-PLLA scaffolds with polymer compositions of 5, 10 and 15%.
S2. Gel fraction and swelling ratio of crosslinked porous scaffolds

Fig. S2 (A) Gel fraction and (B) swelling ratio determined for the crosslinked solid substrates and porous scaffolds with polymer compositions of 9, 5 and 3%.

S3. Crystallization in scaffolds with varied polymer composition

Fig. S3 DSC curves of crosslinked solid PPF-co-PLLA substrates and crosslinked 3-D porous PPF-co-PLLA scaffolds with polymer compositions of 9, 5 and 3%.
S4. Cytotoxicity of crosslinked porous scaffolds

**Fig. S4** Cytotoxicity of crosslinked PPF-co-PLLA solid and porous scaffolds after 5 days co-culture with MC3T3 cells.