Supporting information for

A Novel Synthesis Microfiber with Controllable Size for Cell Encapsulation and Culture

Fang Wu,† Xiao-Jie Ju,*a,b† Xiao-Heng He,a Ming-Yue Jiang,a Wei Wang,a Zhuang Liu,a Rui Xie,a Bin He,c and Liang-Yin Chu,a,b,d

a. School of Chemical Engineering, Sichuan University, Chengdu, Sichuan 610065, P. R. China.
b. State Key Laboratory of Polymer Materials Engineering, Sichuan University, Chengdu, Sichuan 610065, P. R. China.
c. National Engineering Research Center for Biomaterials, Sichuan University, Chengdu, Sichuan 610065, P. R. China.
d. Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM), Nanjing, Jiangsu 211816, P. R. China

Email: juxiaojie@scu.edu.cn (X.-J. Ju), bhe@scu.edu.cn (B. He), chuly@scu.edu.cn (L.-Y. Chu)

Supplementary Figures s1-s2

Captions for Supplementary Movies s1-s2
**Fig. s1.** The crosslinking process of PEG-4Mal prepolymer in solution without TEA. The drop contains PEG-4Mal polymers and phenol red, and the solution in the bottle consists of DTT and CMC-Na.
Fig. S2. The crosslinking process of PEG-4Mal prepolymer in solution with TEA. The drop contains PEG-4Mal polymers and phenol red, and the solution in the bottle consists of DTT, TEA and CMC-Na.
Captions for Supplementary Movies s1-s2

**Movie s1.** The crosslinking process of PEG-4Mal prepolymer in solution without TEA.

**Movie s2.** The crosslinking process of PEG-4Mal prepolymer in solution with TEA.