

Supplementary Data

Phenotypic Regulation of Liver Cells in a Biofunctionalized 3D Hydrogel Platform

Myung Hee Kim^{a,b}; *Supriya K. Kumar*^{a,b}; *Hitomi Shirahama*^{a,b}; *Jeongeun Seo*; *Jae Ho Lee*^{a,b}; *Nam-Joon Cho*^{a,b,c*}

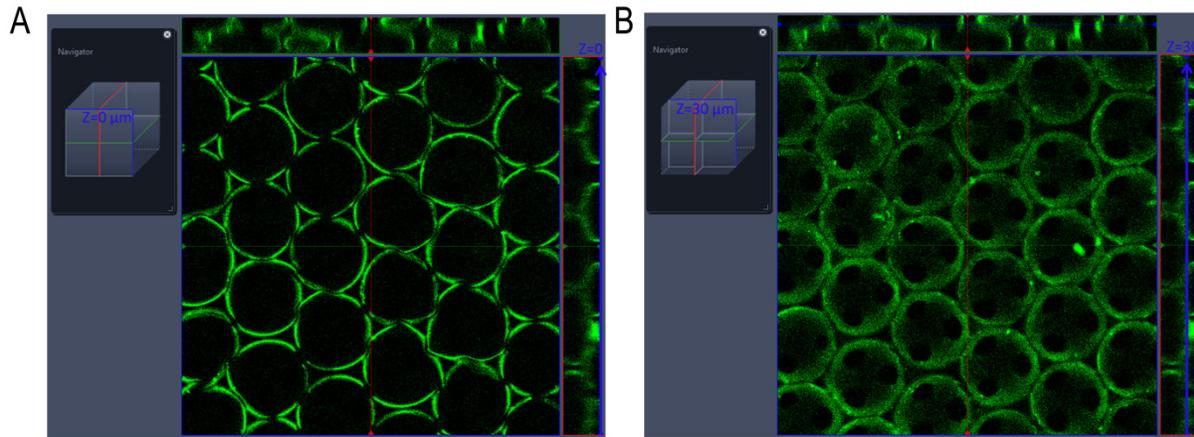
^aSchool of Materials Science and Engineering, Nanyang Technological University, 50 Nanyang Avenue 639798, Singapore

^bCentre for Biomimetic Sensor Science, Nanyang Technological University, 50 Nanyang Avenue 639798, Singapore

^cSchool of Chemical and Biomedical Engineering, Nanyang Technological University, 62 Nanyang Avenue 637459, Singapore

*Corresponding author. School of Materials Science and Engineering, Nanyang Technological University, 50 Nanyang Avenue 639798, Singapore Tel: +65 6592 7945; fax: +65 6790 9081
Email address: njcho@e.ntu.edu.sg (N. -J. Cho)

Supplementary Figure 1. Zen image processing software shows the orthogonal display of the top and middle Fig. 3 confocal images. (A) The “top” image is set as the top most plane of the scaffold ($z = 0 \mu\text{m}$). (B) The “middle” image plane is set $30 \mu\text{m}$ below ($z = -30 \mu\text{m}$). Both representative orthogonal views show the xy image plane (bottom), xz image plane (top) and the yz image plane (right).



Supplementary Figure 2. Evaluation of liver specific function by immunohistochemistry. Huh-7.5 cells were seeded in Col I coated or bare 3D ICC scaffolds and stained for F-actin (red), counterstained by DAPI for DNA (blue), and either (A) stained for albumin (green) on Day 7 or (B) stained for CYP3A4 (green) on day 14. Representative confocal images show stained Huh-7.5 cells (scale bars = 100 μ m).

