

## **Supporting Information**

### **Nanofibrous Tubular 3D platform for Single Dental Pulp Stem Cell**

#### **Polarization**

*Bei Chang, Chi Ma, and Xiaohua Liu\**

Department of Biomedical Sciences,

Texas A&M University College of Dentistry, Dallas, TX 75246, USA

\*Correspondence to:

Xiaohua Liu, PhD

Associate Professor

Department of Biomedical Sciences

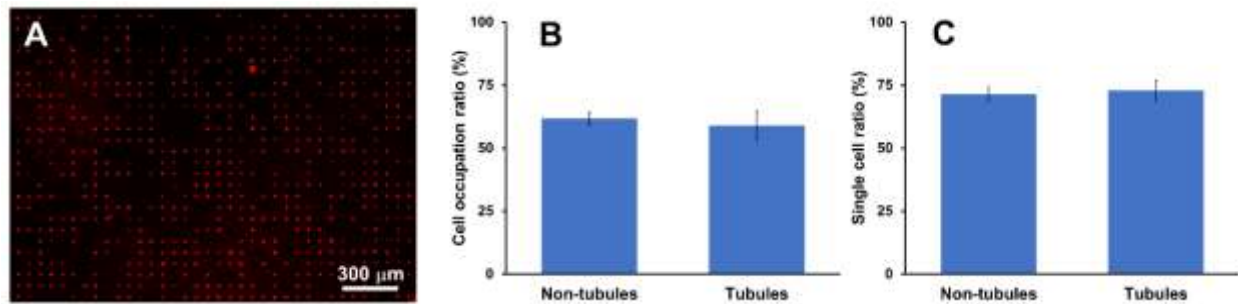
Texas A&M University College of Dentistry

3302 Gaston Ave., Dallas, TX 75246

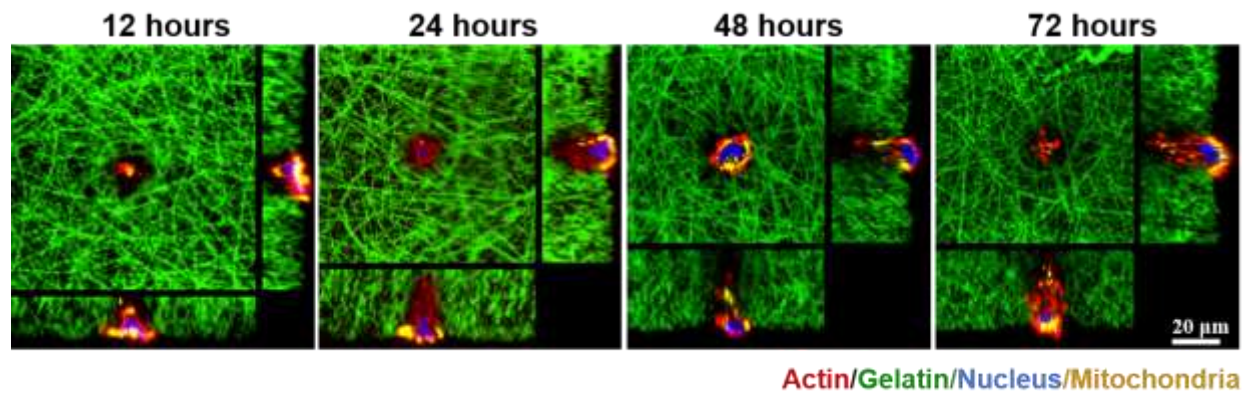
Phone: 214-370-7007

Fax: 214-874-4538

Email: [xliu1@tamu.edu](mailto:xliu1@tamu.edu)



**Figure S1.** Biocompatibility of the tubular microislands. (A) The confocal image shows high cell occupation ratio and the capability to confine one single cell in each microisland of the 3D platform. (B, C) indicate no significant change in the cell occupation ratio (B) or single cell ratio (C) between the non-tubular and tubular microislands of the platform. Red represents phalloidin-633-conjugated actin filaments.



**Figure S2.** Activity of single DPSCs on the tubular microislands. Images show the staining of mitochondria within both the cell body and the cellular process at the observation time points of 12, 24, 48 and 72 hours.