ACCSCIENCE PUBLISHING

International Journal of Bioprinting

RESEARCH ARTICLE

3D-bioprinted hydrogels with instructive niches for dental pulp regeneration

Supplementary file

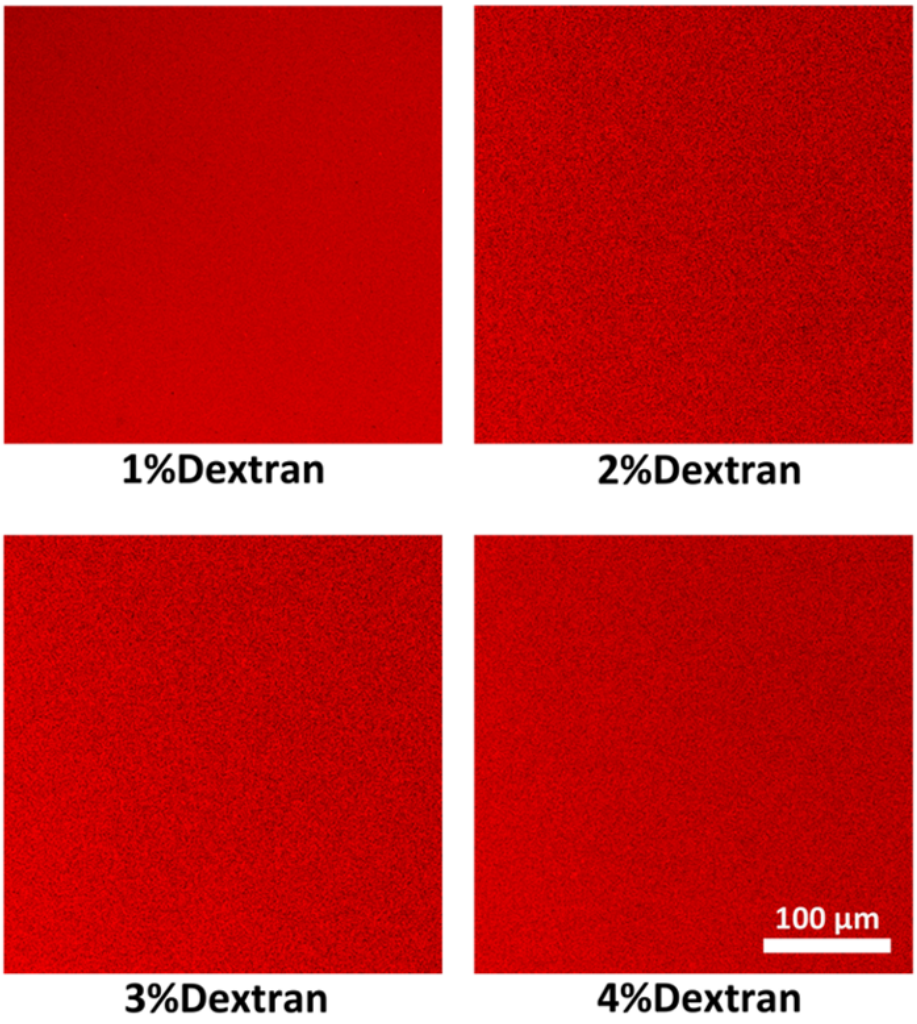

Figure S1. Fluorescent micrographs of the interconnected porous DPGCs with different dextran concentrations at 1%, 2%, 3%, and 4% w/v.

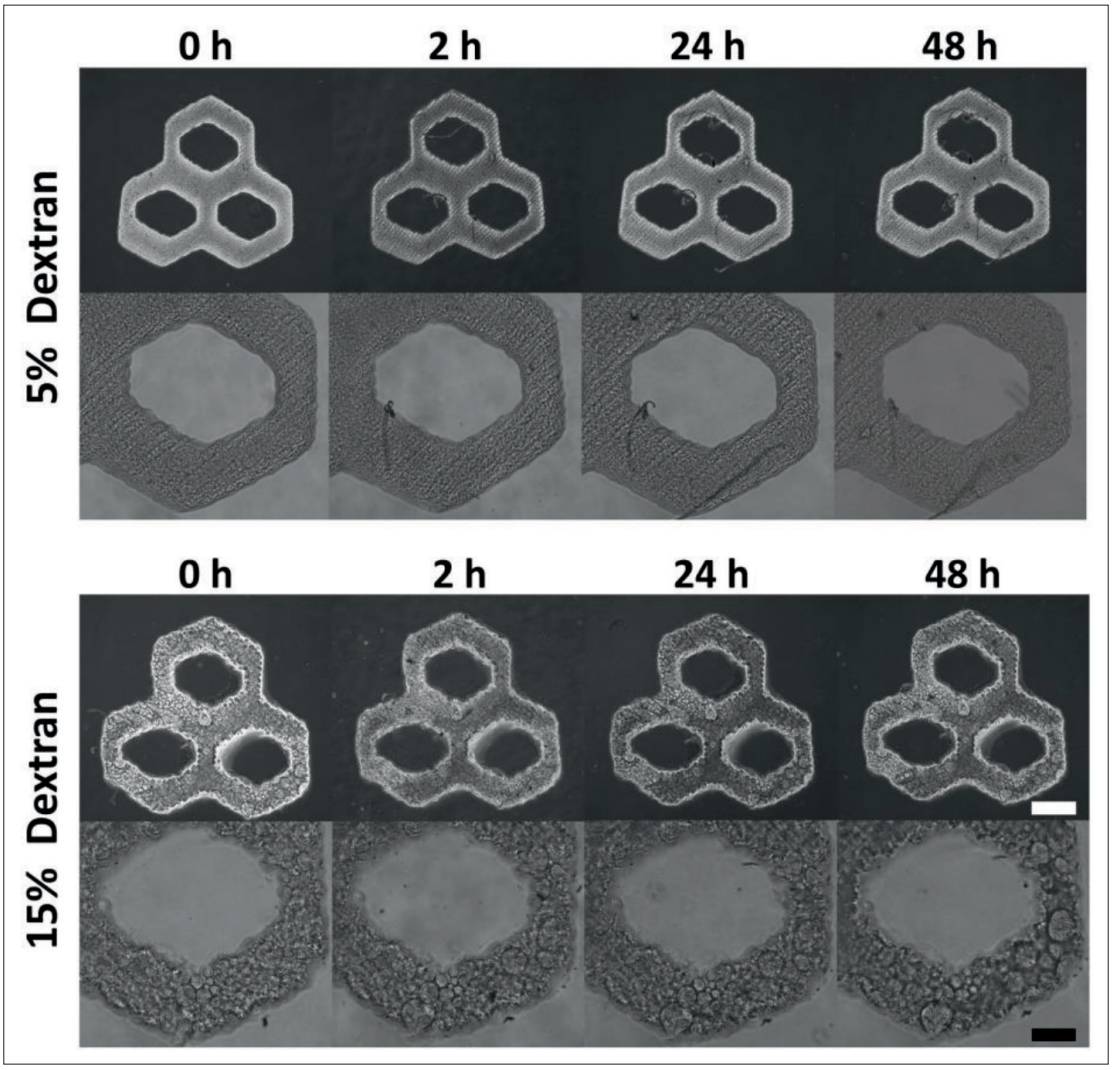

Figure S2. Micrographs showing size stability of 3D-printed DPGCs with 5% and 15% w/v dextran during 48-h incubation. White scale bar: 500 μm, black scale bar: 200 μm.

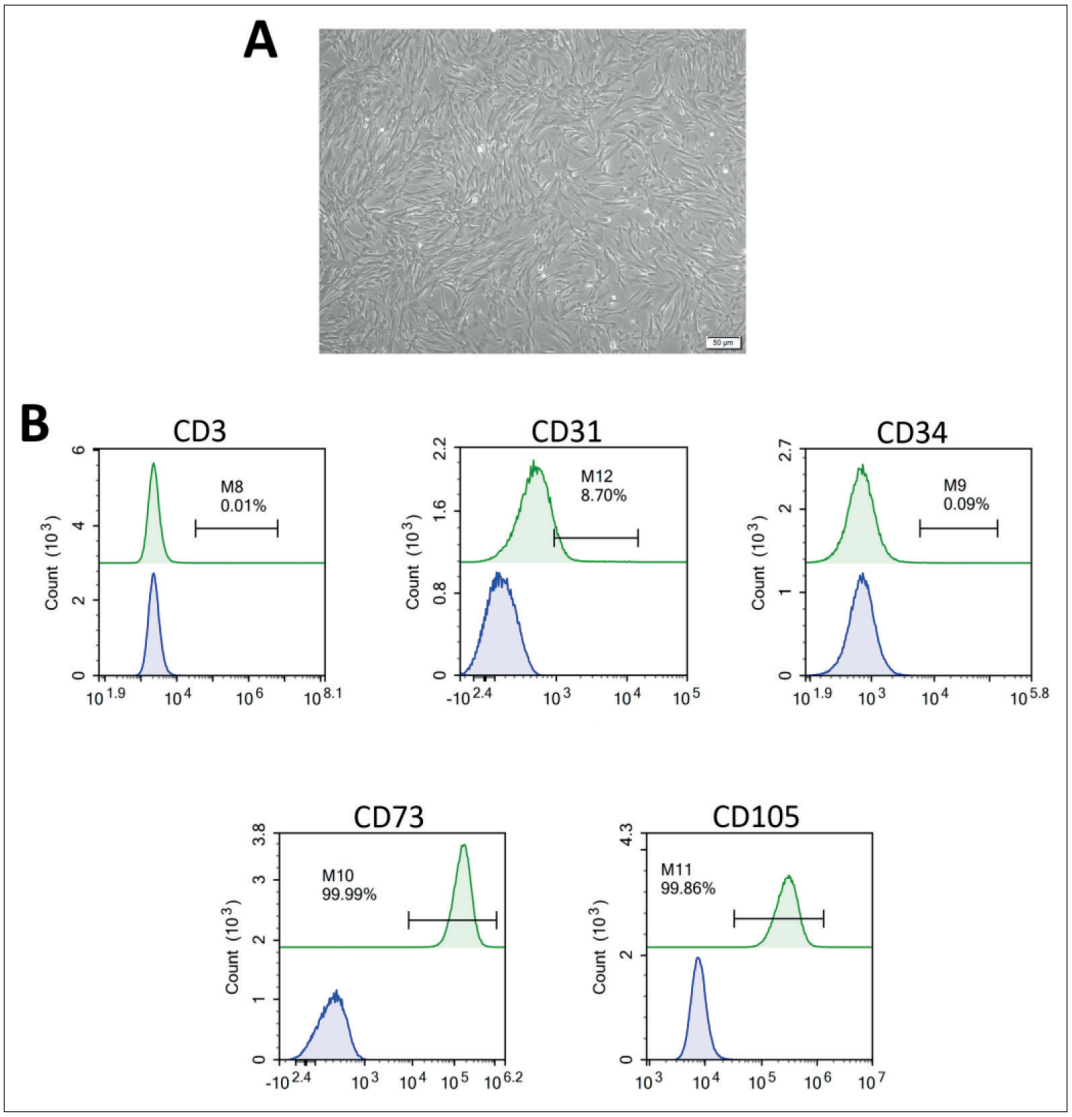

Figure S3. Cell identification. (A) Micrographs of hDPSCs morphology. Scale bar: 50 μm. (B) Flow cytometric analyses demonstrating that the obtained hDPSCs were positive for the putative mesenchymal stem cell markers, CD73 (99.99%) and CD105 (99.86%), but negative for T-cell marker CD3 (0.01%) and hematopoietic stem cell markers such as CD31 (8.7%) and CD34 (0.09%).

Table S1. Sequence of primers used in this study for real-time quantitative PCR

Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')
SOX2	ACCAGCGCATGGACAGTTAC	CGAGCTGGTCATGGAGTTGT
NANOG	GAAATACCTCAGCCTCCAGC	GCGTCACACCATTGCTATTC
OCT4	AGCGAACCAGTATCGAGAACC	CTGATCTGCTGCAGTGTGGGT
ALP	CCTTGTAGCCAGGCCCATTG	GGACCATTCCCACGTCTTCAC
RUNX2	AGATGATGACACTGCCACCT	TGGCTGGATAGTGCATTCGT
OCN	GTGCAGAGTCCAGCAAAGGT	TCAGCCAACTCGTCACAGTC
OPN	GAAGTTTCGCAGACCTGACAT	GTATGCACCATTCAACTCCTCG
DSPP	GGGAAGAGCCAAGATAAGGGAA	ACCTTCGTTGCCTTTCCCAA
GAPDH	CTTTGGTATCGTGGAAGGACTC	GTAGAGGCAGGGATGATGTTCT