ACCSCIENCE PUBLISHING

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RESEARCH ARTICLE

Tiny bricks for oral bioprinting: Exploring gingiva and dental pulp-derived organ building blocks

Supplementary File

Table S1. Young's moduli (kPa) of the 3-day and 7-day oral tissue organ building blocks

Groups	Young's moduli (kPa)	
	3-day	7-day
G	0.8±0.5	0.8±0.4
P	1.6±0.6	3.7±1.7
M	0.9±0.3	2.4±1.6
PG	1.1±0.3	1.5±0.5
GP	1.2±0.5	1.7±1.0

Notes: G: Gingiva-derived cells; GP: Layering pulp-derived cells on a core composed of gingiva-derived cells; M: Mixing gingiva- and pulp-derived cells; P: Pulp-derived cells; PG: Layering gingiva-derived cells on a core composed of pulp-derived cells.

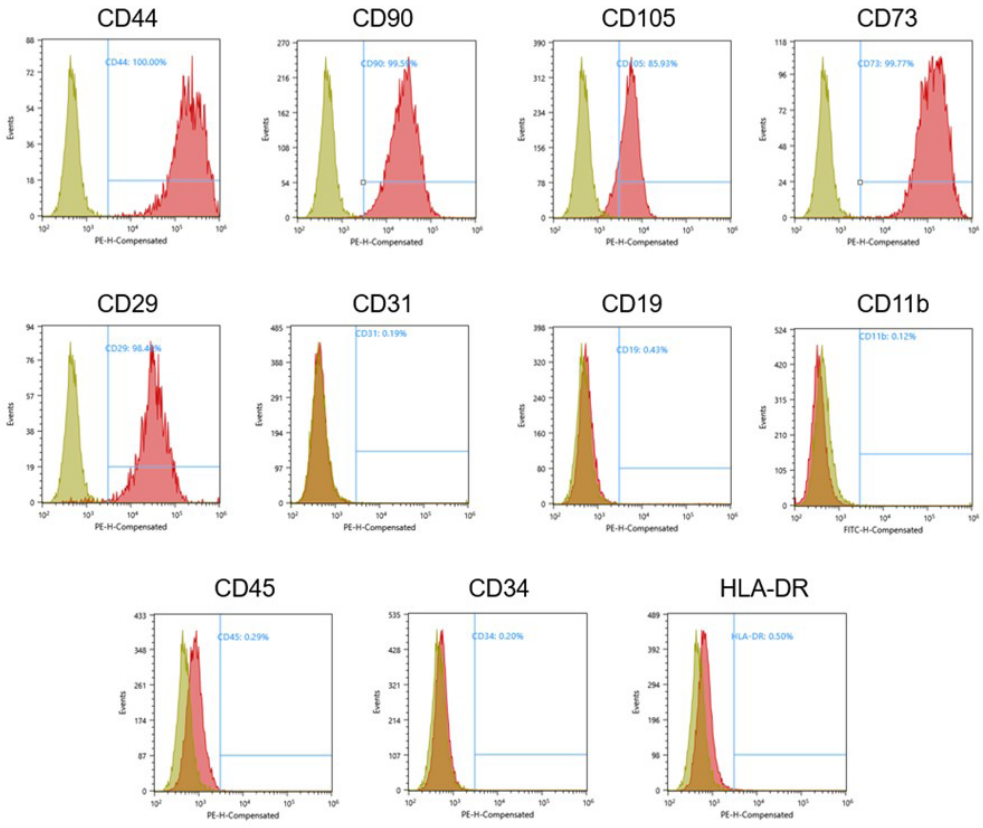


Figure S1. Surface marker expressions in gingiva-derived stromal cells at passage 5
Abbreviations: CD: Cluster of differentiation; HLA-DR: Human leukocyte antigen–D-related.

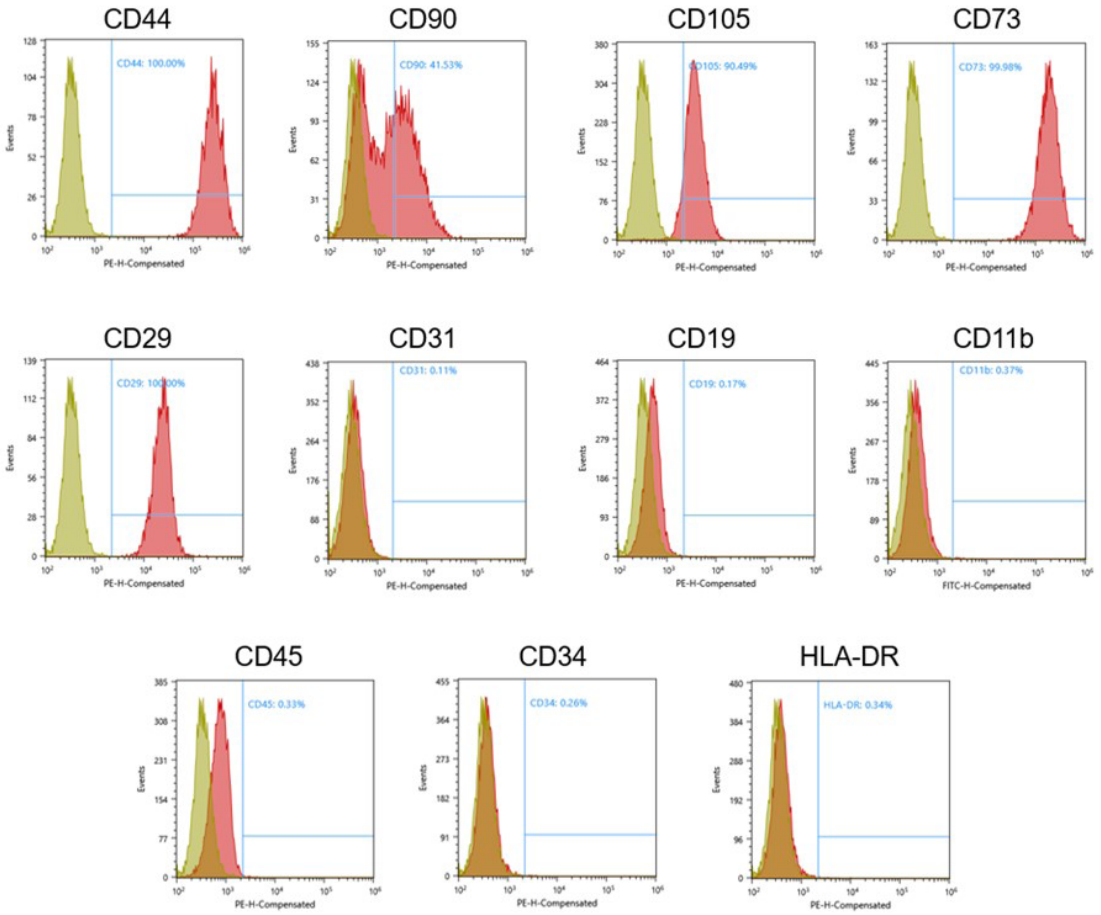


Figure S2. Surface marker expressions in pulp-derived stromal cells at passage 5
Abbreviations: CD: Cluster of differentiation; HLA-DR: Human leukocyte antigen–D-related.

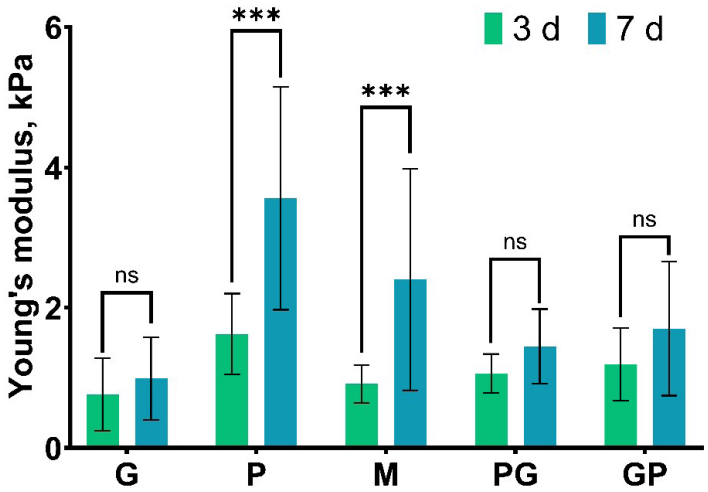
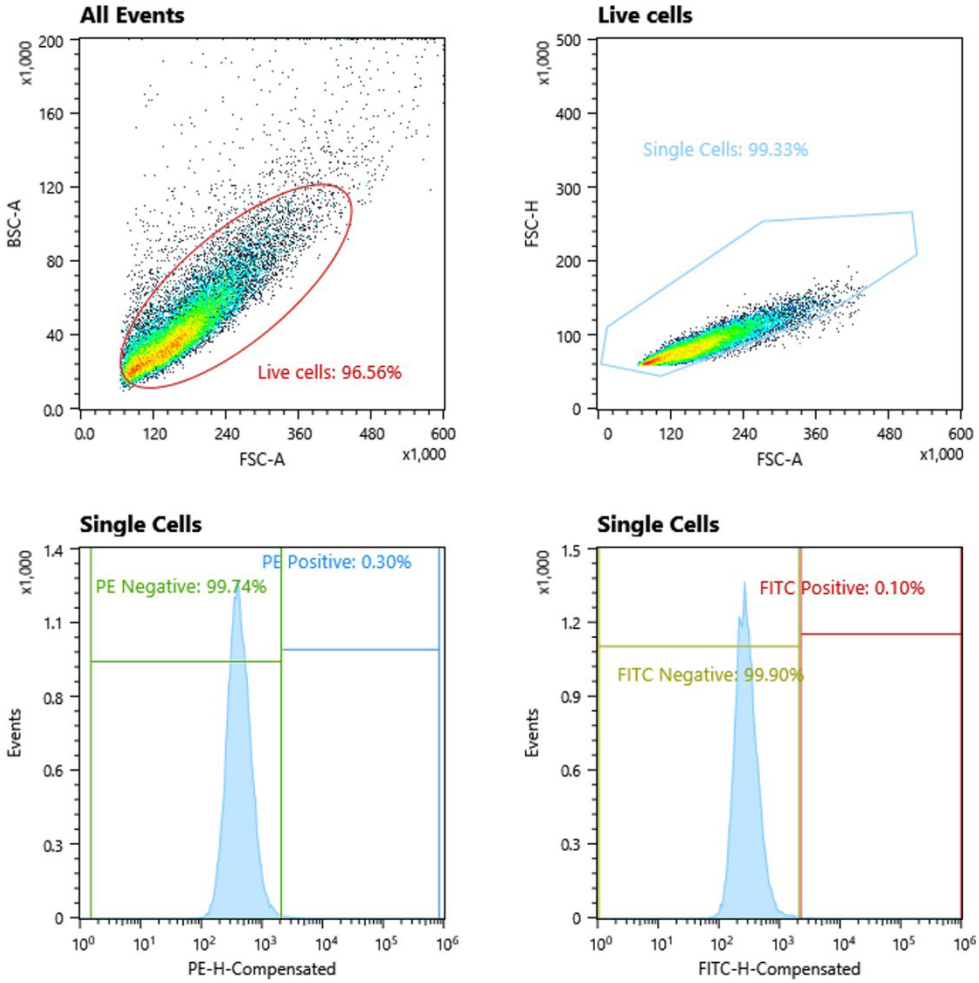


Figure S3. A summarizing diagram showing the difference in stiffness between 3-day and 7-day organ building blocks
Notes: Data on graphs are presented as mean ± SD. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$, ns: Not significant. G: Gingiva-derived cells; GP: Layering pulp-derived cells on a core composed of gingiva-derived cells; M: Mixing gingiva- and pulp-derived cells; P: Pulp-derived cells; PG: Layering gingiva-derived cells on a core composed of pulp-derived cells.



Gates and Statistics

Name	Events	%Parent	%Total
All Events	25,000	0.00%	100.00%
Live cells	24,141	96.56%	96.56%
Single Cells	23,979	99.33%	95.92%
FITC Positi...	25	0.10%	0.10%
FITC Nega...	23,954	99.90%	95.82%
PE Positive	72	0.30%	0.29%
PE Negative	23,916	99.74%	95.66%

Figure S4. Gating strategy in flow cytometry
Abbreviations: BSC-A: Backscatter (Signal) Area; FITC-H: Fluorescein Isothiocyanate (fluorescence) Height; FSC-H: Forward Scatter Height; FSC-A: Forward Scatter Area; PE-H: Phycoerythrin (fluorescence) Height.