

Electronic Supplementary Information (ESI):

Electromagnetic Fields-assisted Cell-laden 3D Printed Poloxamer-407 Hydrogel for Enhanced Osteogenesis

Sayan Deb Dutta, Jin Bin, Keya Ganguly, Dinesh K. Patel, and Ki-Taek Lim

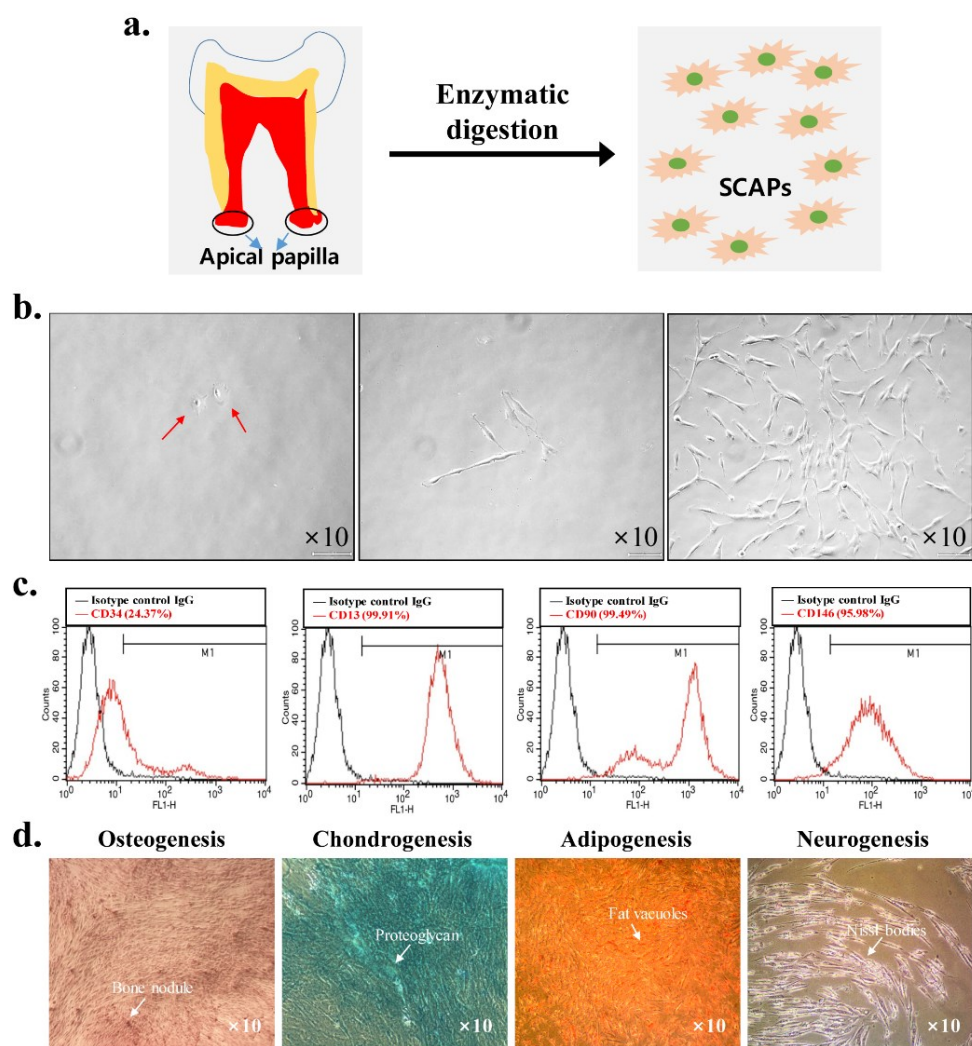


Fig. S1. Isolation and characterization of stem cells from apical papilla (SCAPs). **(a)** Schematic presentation of SCAPs isolation from human molar tooth, **(b)** The primary culture of SCAPs at indicated time interval (magnification $\times 10$), **(c)** Flow cytometry analysis of SCAPs, and **(d)** The multilineage differentiation potential of SCAPs after 21 days of culture under different induction media (magnification $\times 10$).

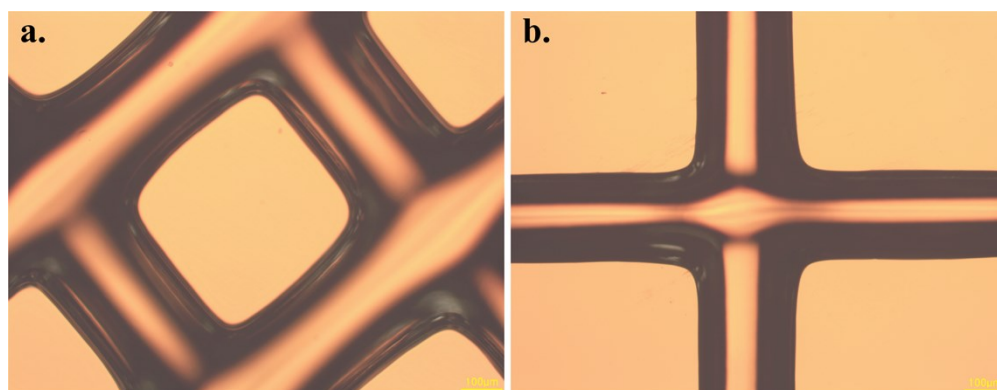


Fig. S2. Optical micrographs of the (a) pore geometry, (b) cross-connecting strand at a printing speed of 5 mm s^{-1} . Scale bar: $100 \mu\text{m}$.

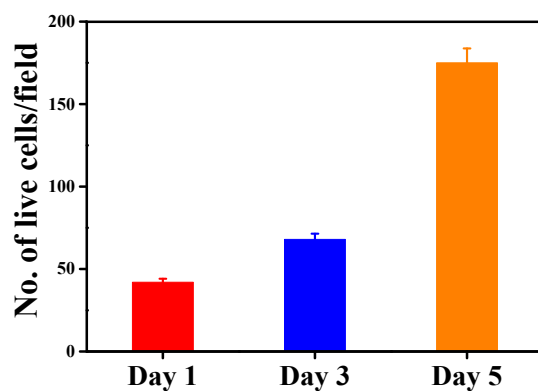


Fig. S3. Quantification of Live/Dead assay at indicated time intervals.

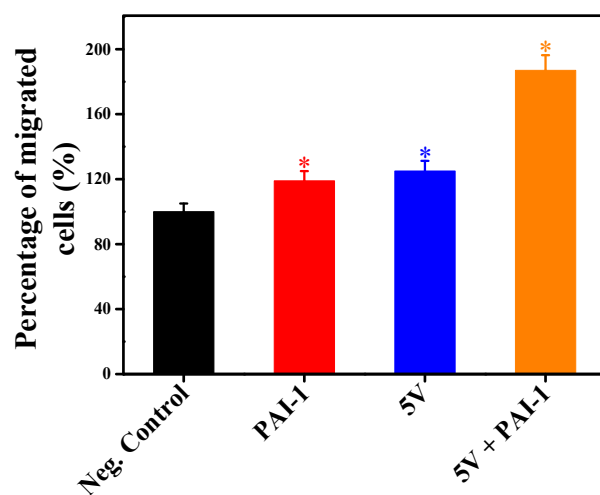


Fig. S4. Quantification of transwell cell migration assay after 12h. Data are mean \pm SD of triplicated experiments, statistical significance at $*p < 0.05$.