International Journal of Bioprinting

RESEARCH ARTICLE

Co-culture bioprinting of tissue-engineered bone-periosteum biphasic complex for repairing critical-sized skull defects in rabbits

Supplementary file

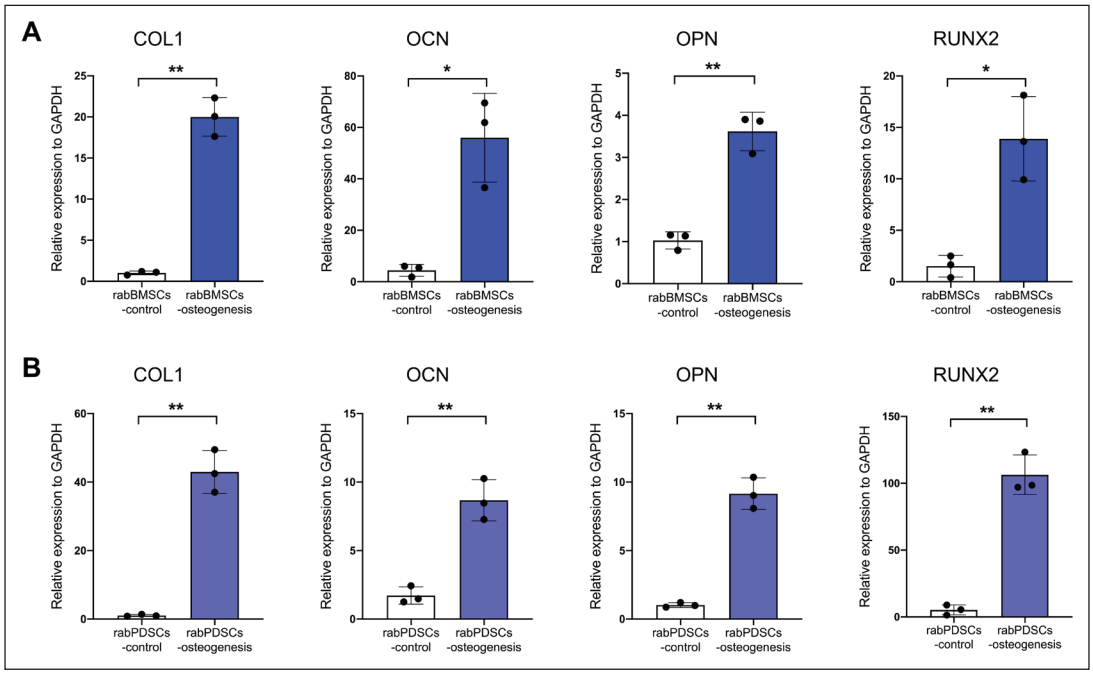

Figure S1. The expression of osteogenesis-related genes in rabBMSCs and rabPDSCs after osteogenesis induction quantified by real-time PCR (qPCR). (A) qPCR analysis of the expression of collagen1 (COL1), osteocalcin (OCN), osteopontin (OPN), and runt-related transcription factor 2 (RUNX2) in rabBMSCs after 7 days of osteogenesis induction. (B) qPCR analysis of the expression of COL1, OCN, OPN, and RUNX2 in rabPDSCs after 7 days of osteogenesis induction. n = 3; $^{*}P < 0.05$; $^{**}P < 0.01$.

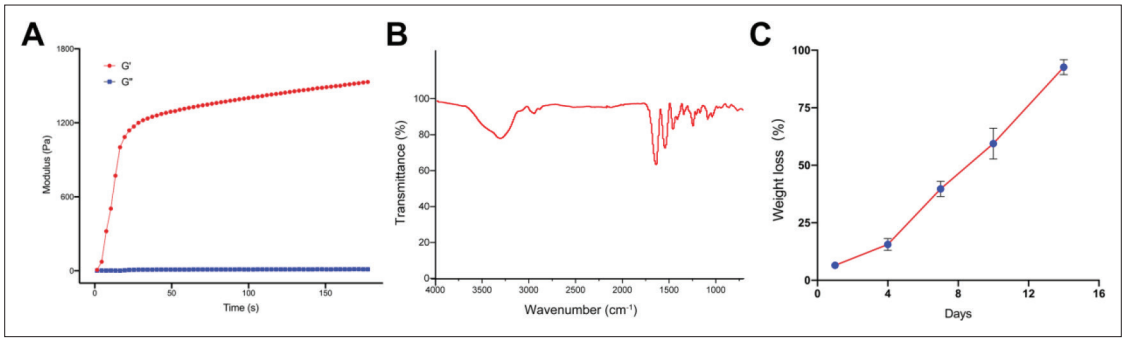

Figure S2. Physical properties of GelMA. (A) The storage modulus (G′) of GelMA. (B) The Fourier transform infrared spectroscopy (FTIR) spectra of GelMA. (C) The degradation behavior of GelMA in 14 days.

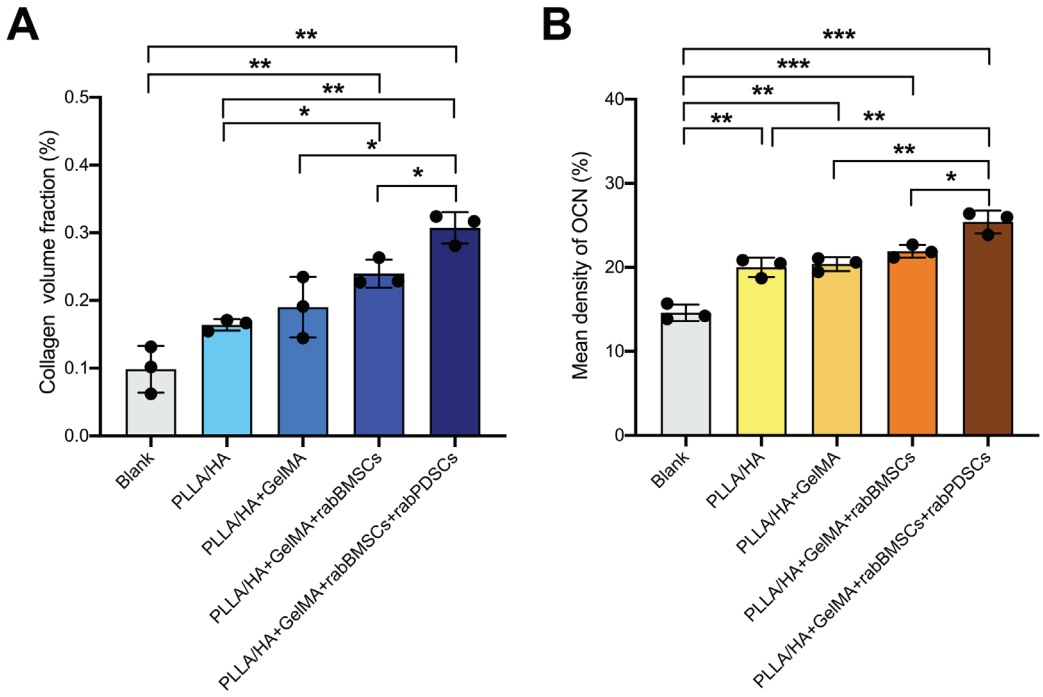

Figure S3. Quantitative expression analysis of Masson's trichrome staining and immunohistochemical staining of OCN. (A) The quantitative results of collagen volume fraction in Masson's trichrome staining. (B) The mean density of OCN (%) in immunohistochemical staining was quantified. n = 3; *$P < 0.05$; **$P < 0.01$; ***$P < 0.001$.