

RESEARCH ARTICLE

Spatiotemporal delivery of BMP-2/FGF-18 in 3D bioprinted tri-phasic osteochondral scaffolds enhanced compartmentalized osteogenic/ chondrogenic differentiation of mesenchymal stem cells with varied organizational morphologies

Supplementary File

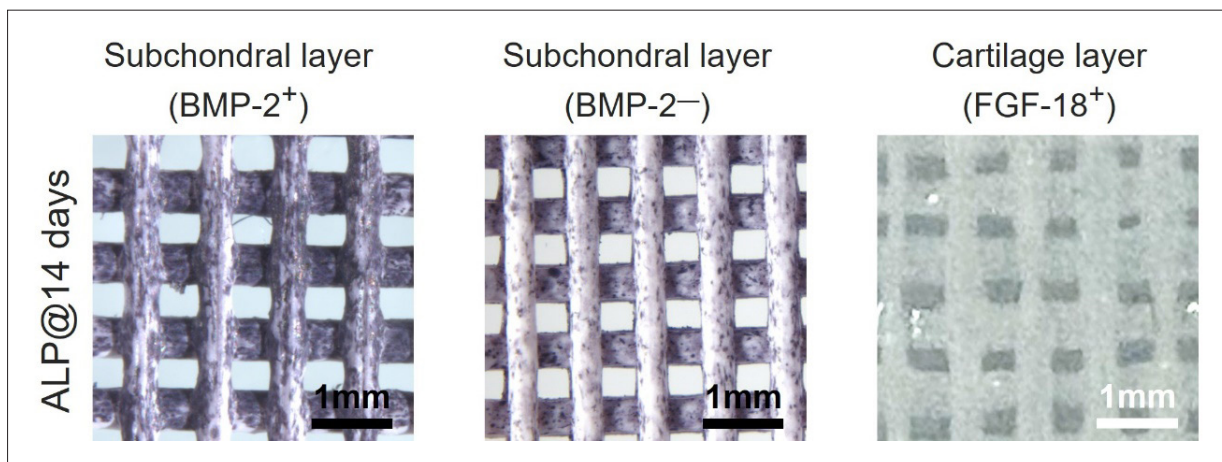


Figure S1. Alkaline phosphatase (ALP) staining to investigate the mineralization of rat bone marrow mesenchymal stem cells (rBMSCs) in the subchondral and cartilage zones of the osteochondral scaffolds after 14 days of culture. Scale bars: 1 mm. Abbreviations: BMP-2, bone morphogenetic protein-2; FGF-18, fibroblast growth factor-18.

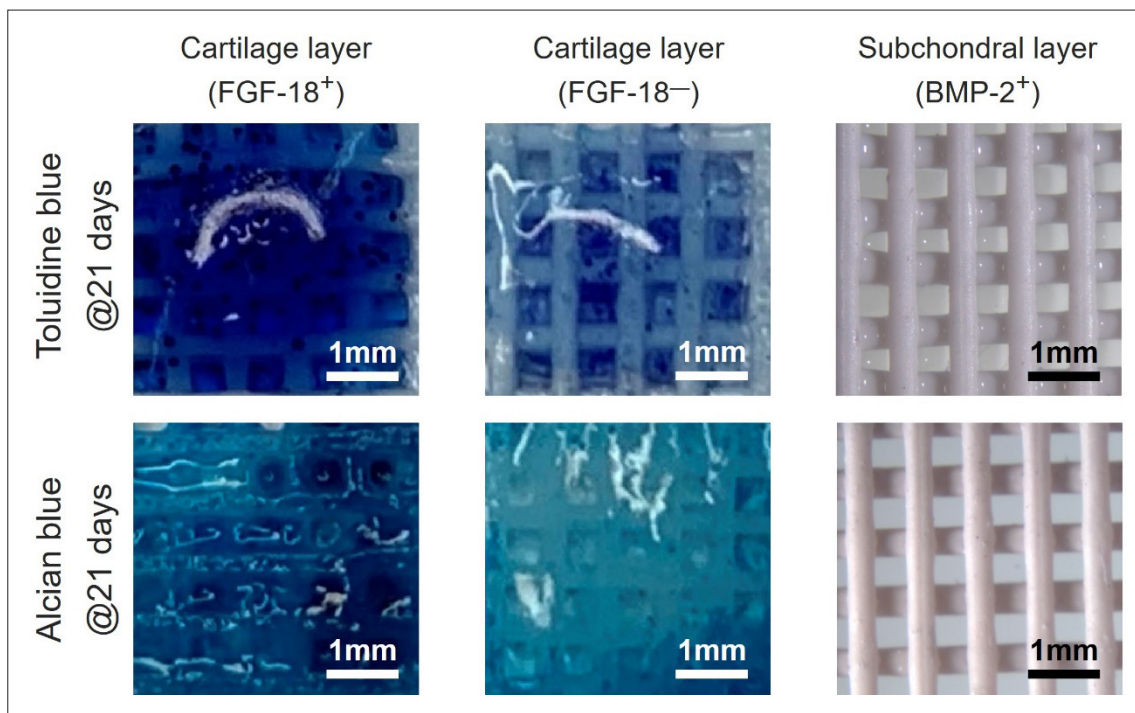


Figure S2. Toluidine blue and alcian blue staining of subchondral and cartilage zones of the osteochondral scaffolds to visualize the expression of glycosaminoglycan (GAG) after 21 days of culture. Abbreviations: BMP-2, bone morphogenetic protein-2; FGF-18, fibroblast growth factor-18.