Electronic Supplementary Material (ESI) for Biomaterials Science.

Supplementary data

Scaffold-Supported Extracellular Matrices Preserved by Magnesium Hydroxide Nanoparticle for Renal Tissue Regeneration

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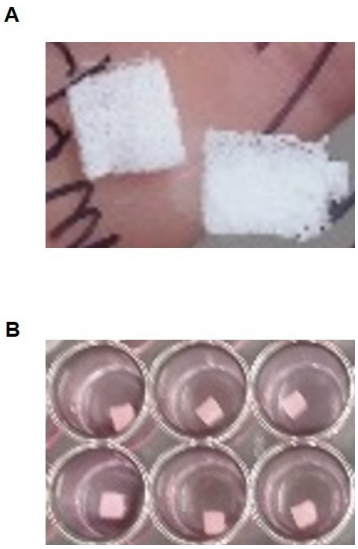


Figure S1. Decellularization of fibroblast cultured on PLGA scaffolds. The photo of (A) PLGA/MH scaffold and (B) fibroblast-cultured PLGA/MH scaffold.

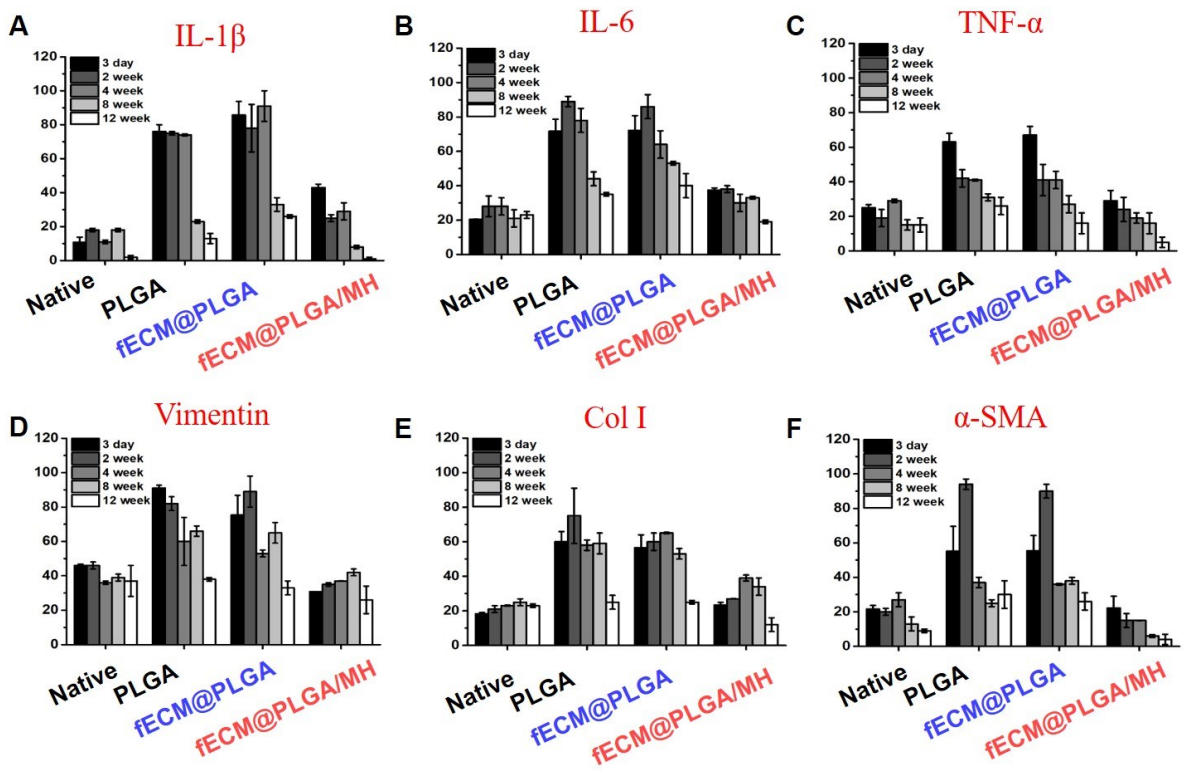


Figure S2. *In vivo* inflammation of implanted extracellular scaffolds. Gene expression analysis of inflammatory markers (A) interleukin 1 beta (IL-1β), (B) interleukin 6 (IL-6), (C) tumor necrosis factor alpha (TNF-α), and fibrosis markers (D) vimentin, (E) collagen type I (Col I), (F) alpha smooth muscle actin (α-SMA) by real-time PCR.

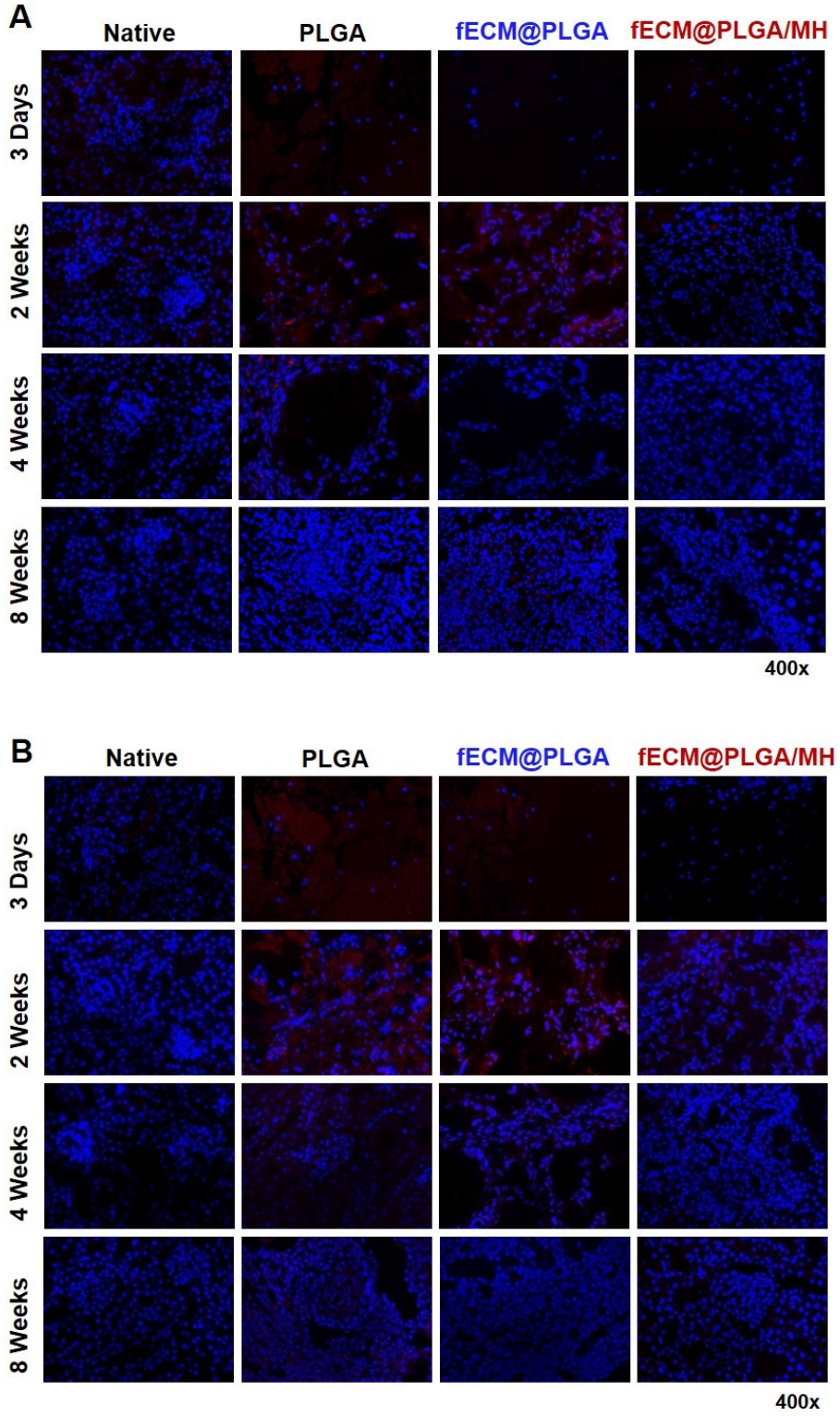
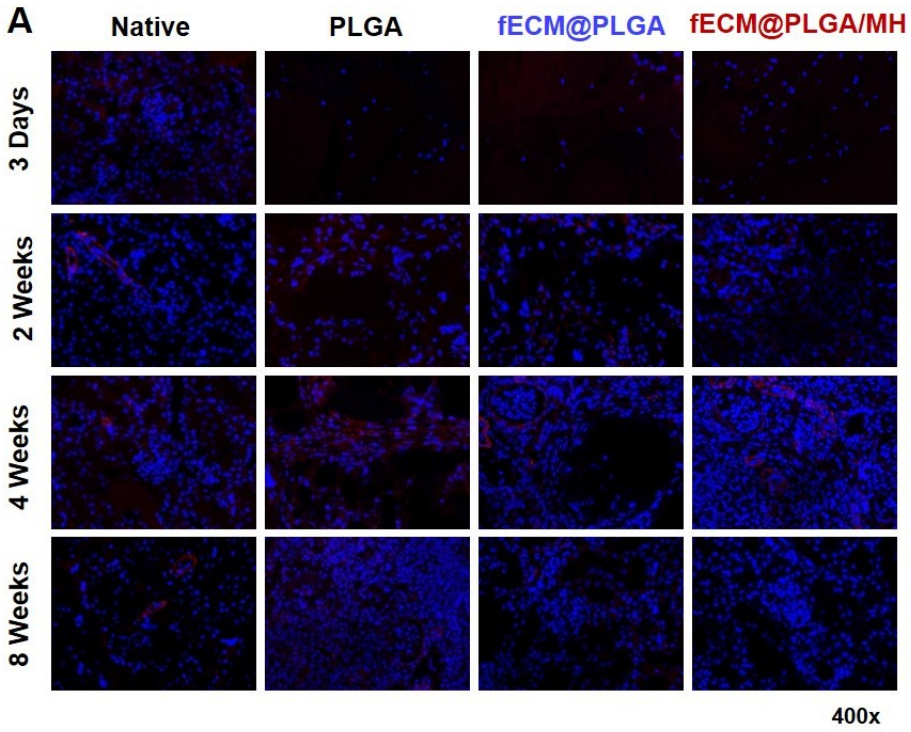


Figure S3. *In vivo* regeneration of implanted scaffolds. Fluorescence images obtained by immunostaining of (A) CD4 and (B) TNF- α.



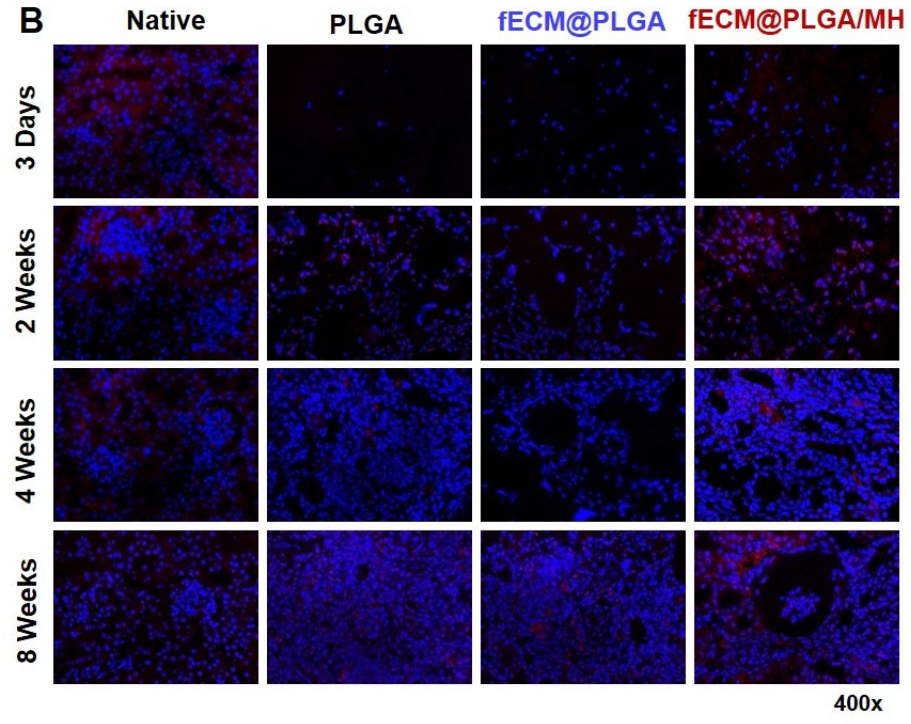


Figure S4. *In vivo* regeneration of implanted matrix covered scaffolds. Fluorescent images obtained by immunostaining of (A) α-SMA and (B) Pax2.

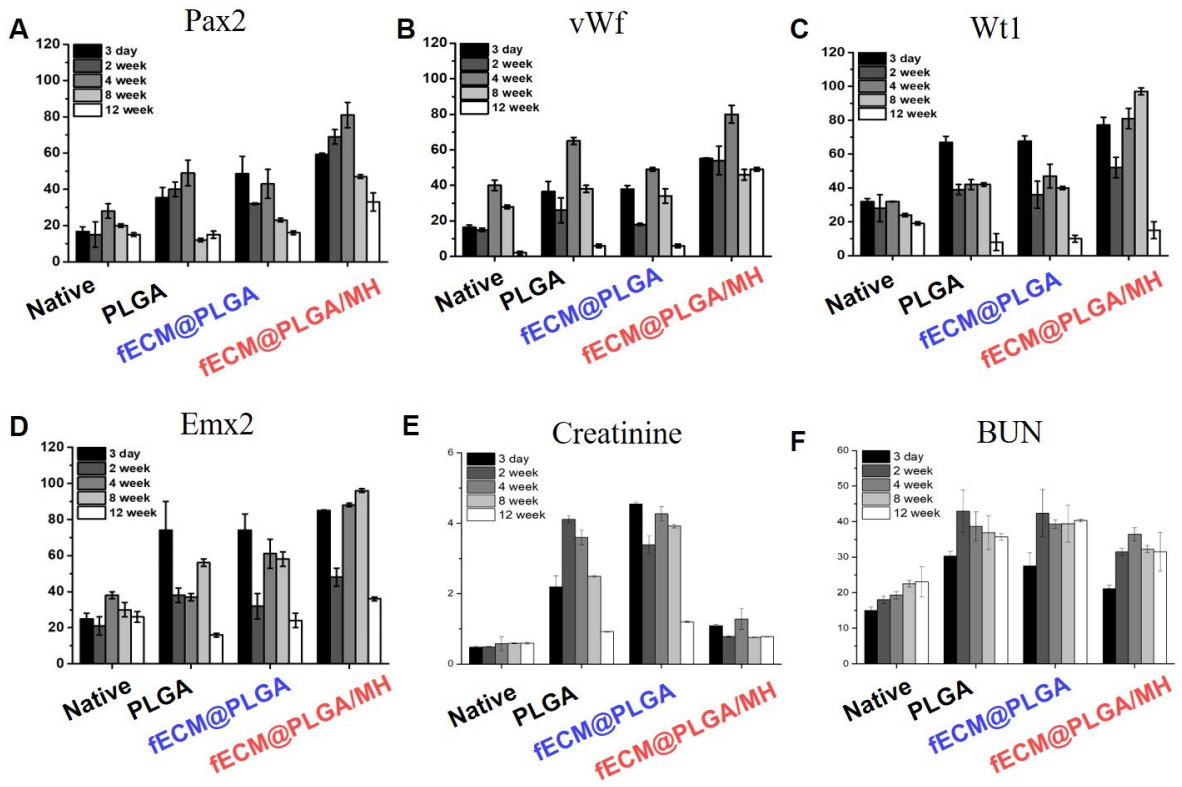


Figure S5. *In vivo* inflammation of implanted extracellular scaffolds. Gene expression analysis of pro-regeneration markers (A) pair box gene 2 (Pax2), (B) von Willebrand factor (vWf) and functional regeneration markers (C) Wilms tumor 1 (Wt1), (D) empty spiracles homeobox 2 (Emx2) by real-time PCR. Renal functions are evaluated after implanting scaffolds into the kidney during 2 and 8 weeks by determination of (E) creatinine and (F) blood urea nitrogen (BUN) in the blood**.**