Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supplementary Material

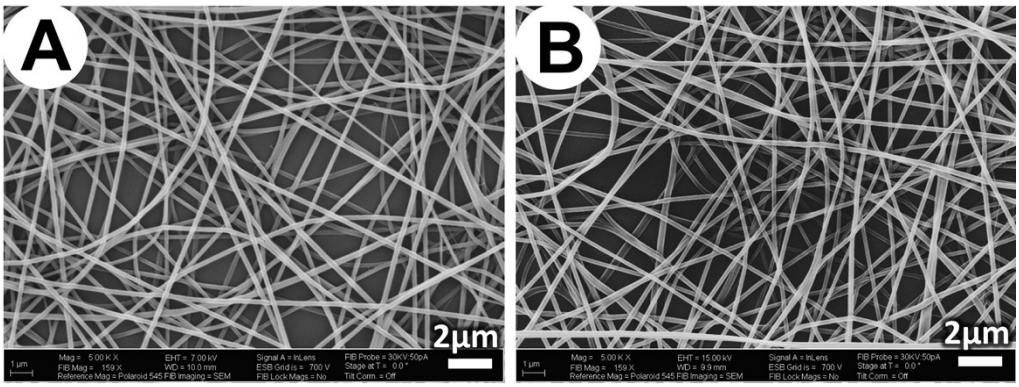

Figure S1. Scanning electron microscopic characterization of PCL/Col (A) and PCL/Fib (B) nanofiber matrices. Scale bar = 2 µm.

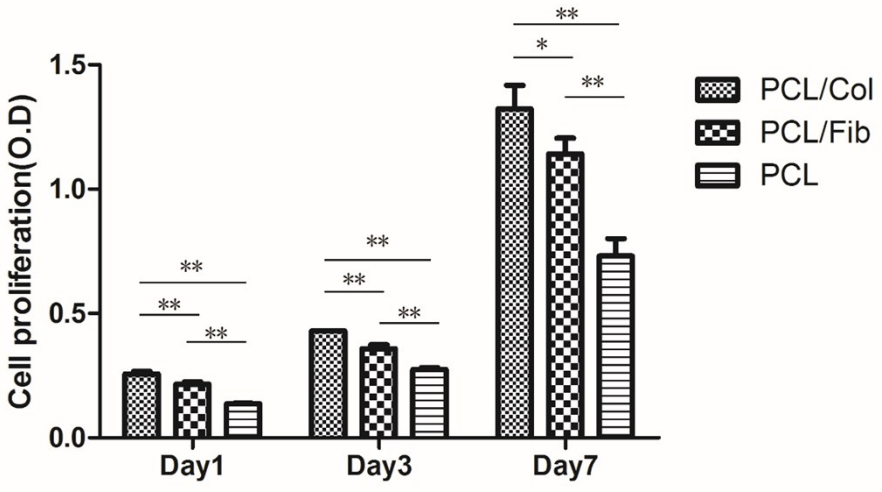

Figure S2. Proliferation of human dermal fibroblasts on nanofiber matrices for up to 7 days (n=4) was determined by MTT assay. * Statistically significant, $p<0.05$.

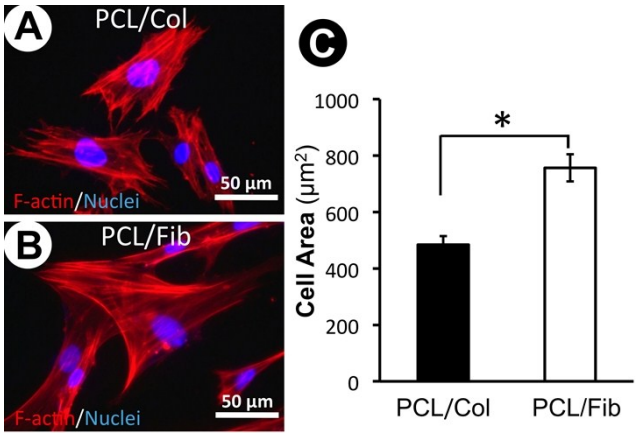

Figure S3. The morphology of fibroblasts on PCL/Col (A) and PCL/Fib (B) nanofiber matrices after culture for 24 h. A-B) Fluorescent images of fibroblasts stained with phalloidin-TRITC for intracellular cytoskeleton protein of F-actin (red) and DAPI for nuclei (blue). Scale bar = 50μm. C) Quantification of the average cell spreading area on PCL/Col and PCL/Fib nanofiber matrices. * Statistically significant, $p<0.05$.

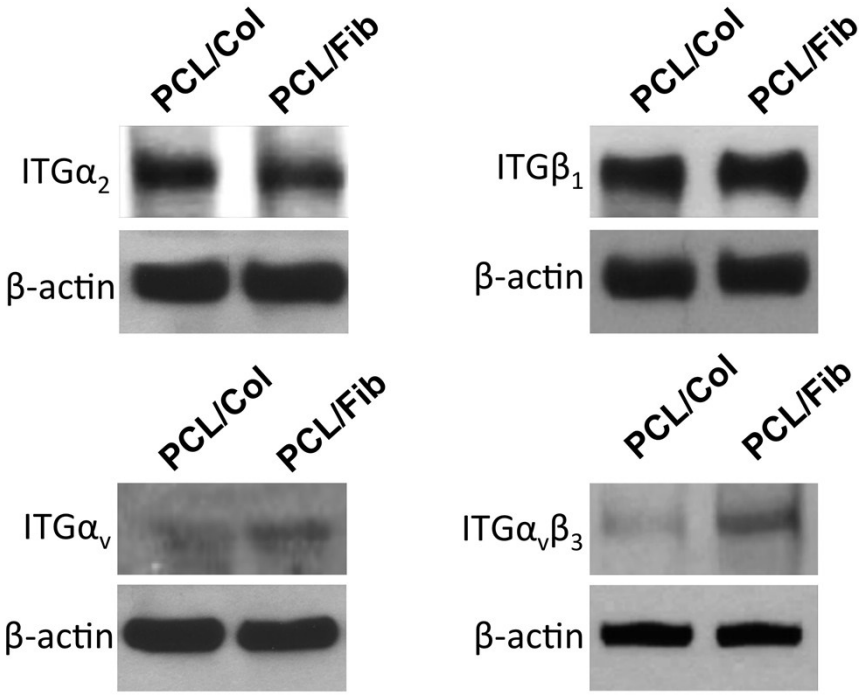

Figure S4. Representative immunoblot images in western blotting analysis of integrin α_2, β_1, α_v and $\alpha_v\beta_3$ in fibroblasts on PCL/Col and PCL/Fib nanofiber matrices without TGF-β_1.

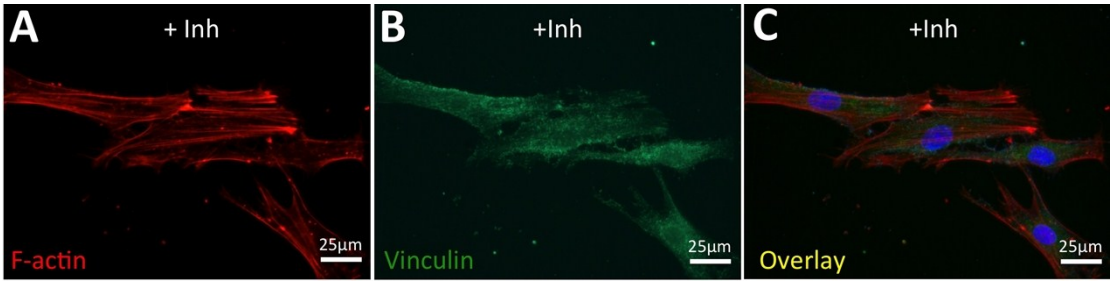

Figure S5. Morphology and focal adhesion formation of human dermal fibroblasts on PCL/Fib nanofiber matrices with integrin α_V inhibitor Cilengitide (10µg/mL). A) Fluorescent staining for F-actin (red) with phalloidin-TRITC. B) Immunofluorescent staining for vinculin (green) with FITC-anti-vinculin antibody. C) Overlay of F-actin and vinculin staining. Cell nuclei stained blue with DAPI.

Video S1. Random migration of fibroblasts on PCL/Fib nanofibers cultured either with (A) or without (B) integrin αV inhibitor (Inh) Cilengitide (10µg/mL).