



SUPPLEMENTARY FIG. S4. SMAD3 shRNA with RUNX2 transduced scaffolds displayed slightly higher level of type X collagen compared to the NT counterparts. Immunohistochemistry staining of scaffold pairs cultured in 5 ng/mL TGF β 3. **(A)** NT and scrambled shRNA; **(B)** NT and SMAD3 shRNA; **(C)** NT and scrambled shRNA with RUNX2; **(D)** NT and SMAD3 shRNA with RUNX2. **(E)** Human osteochondral control. **(F)** Representative negative control without primary antibody. *Square brackets* indicate scaffold pairs cultured in the same well. Type X collagen was not observed in NT or virally transduced scaffolds. Scale bar = 100 μ m.