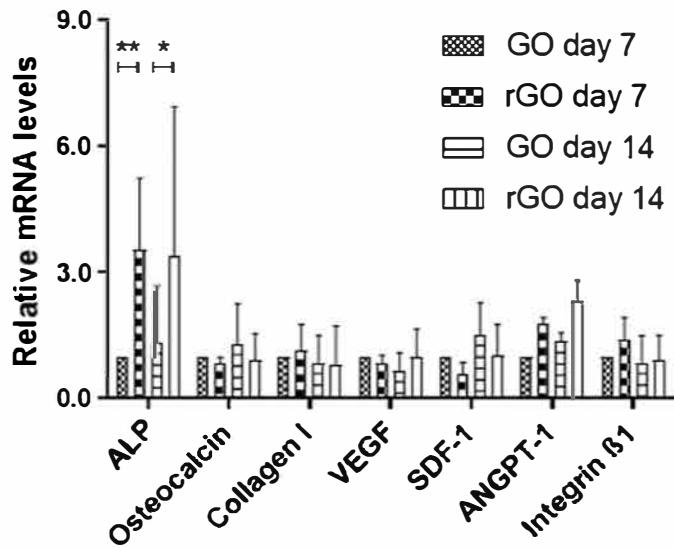
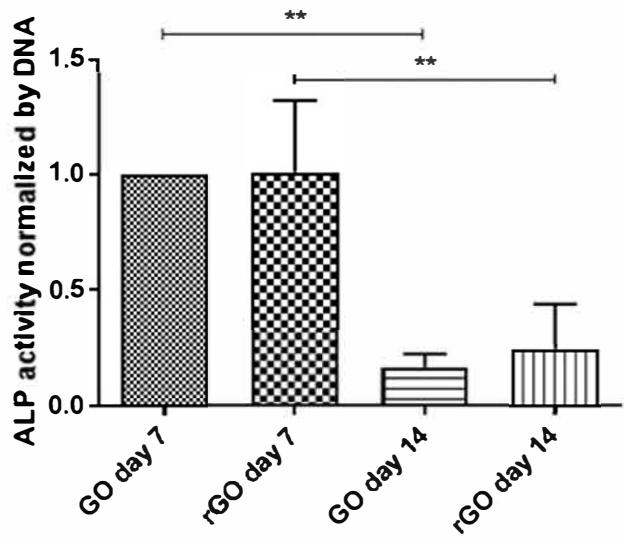


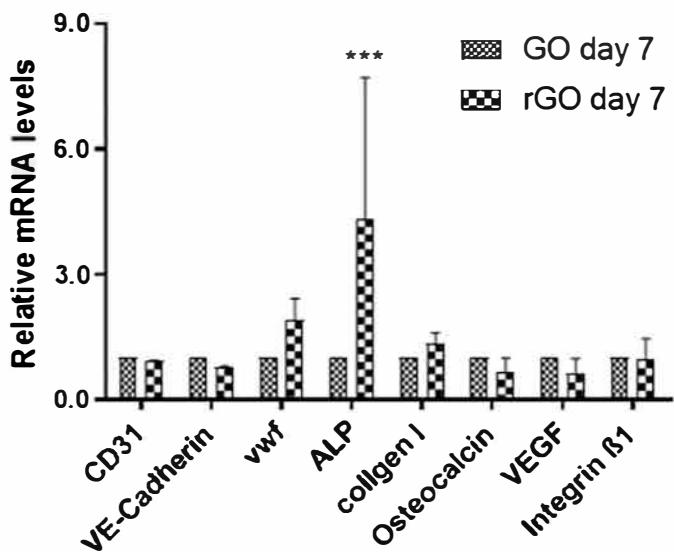
(a)



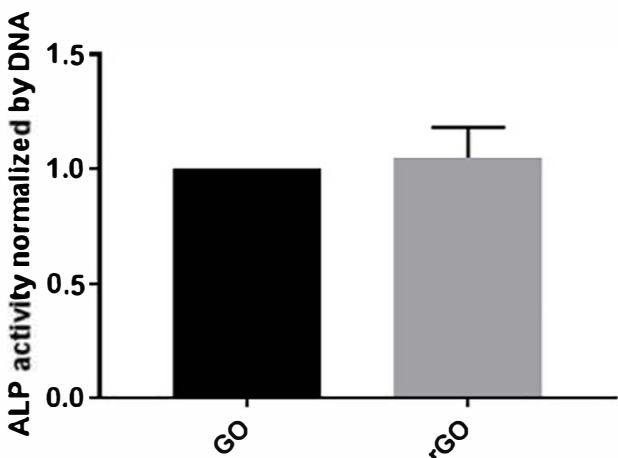
(b)



(c)



(d)



Supplementary Figure S1. (a) Relative gene expression of the osteogenic markers: ALP, osteocalcin, collagen I, angiogenesis relevant molecules: SDF-1, VEGF, ANGPT-1 and cell-matrix adhesion molecule integrin evaluated by semi-quantitative RT-PCR for MSC mono-cultures on F-GO/F-rGO on day 7 and 14. 2-way ANOVA, * $p<0.05$, n=3. (b) The ALP activity normalized by DNA content for the MSC mono-cultures on F-GO (as control) and F-rGO on day 7 and 14. 1-way ANOVA, * $p<0.05$, ** $p<0.01$, n=3. (c) Relative gene expression of the endothelial, osteogenic markers and cell-matrix adhesion molecule integrin evaluated by semi-quantitative RT-PCR for MSC/OEC co-cultures on F-GO/F-rGO on day 7. 2-way ANOVA, *** $p<0.001$, n=3. (d) The ALP activity normalized by DNA content for MSC/OEC co-cultures on F-GO (as control) and F-rGO on day 7. t-test, n=3