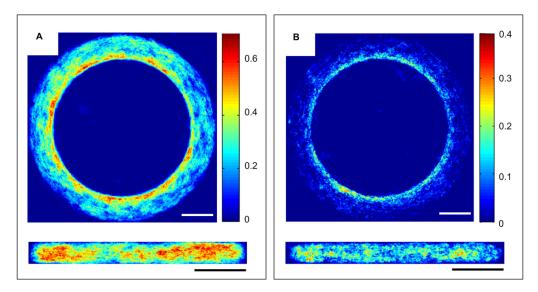
## **Supplemental Figures**

Wan LQ, Kang SM, Eng G, Grayson WL, Lu XL, Huo B, Gimble J, Guo XE, Mow VC, Vunjak-Novakovic G. Geometric control of human stem cell morphology and differentiation. Integr Biol (Camb). 2(7-8):346-353, 2010.



**Fig S1.** Frequency maps of osteogenic differentiation (A) and adipogenic differentiation (B) of human adipose-derived stem cells (hASCs) in 1:1 mixture of osteogenic and adipogenic media for 4 days. At the top are cells on rings with an inner diameter of  $1000\mu m$  and a width of  $200 \mu m$ , and the bottom rectangles are  $1000\mu m$  in length and  $100\mu m$  in width. Scale bars:  $200 \mu m$ .

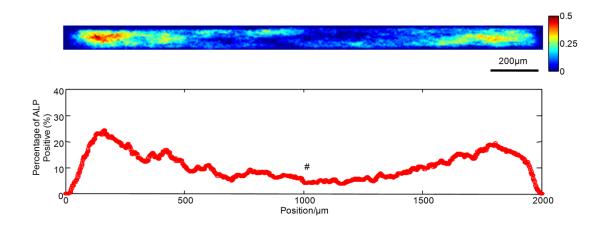


Fig S2. Alkaline phosphatase activity (ALP) of human adipose-derived stem cells (hASCs) on rectangles  $(2,000x100 \ \mu m)$  in osteogenic differentiation medium for 3 days. At the top is the frequency map and the corresponding average ALP activity along the length of each pattern is shown at the bottom. (# significantly different from the peak ALP near two ends in the same rectangle)